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Who Votes for Mayor? A PSU Pilot Research Report

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Jurjevich, Jason R.; Keisling, Phil; Rancik, Kevin Christopher; and Gorecki, Carson, "Who Votes for Mayor? A PSU Pilot Research Report" (2015). *Center for Public Service Publications and Reports*. 6.

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Knight Foundation

Who Votes for Mayor?

PSU Pilot Research Report
July 2015



Portland State
UNIVERSITY

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Introduction

In 2010, more than 8 in 10 Americans lived in “urban areas”, as defined by the U.S. Census Bureau—an increase from Census 2000². Almost half of all Americans now live in the nation’s largest 25 metropolitan statistical areas (MSAs).

The draw of urban areas, according to Bruce Katz and Jennifer Bradley’s *Metropolitan Revolution* thesis³, is in part due to enhanced quality of life in many of the nation’s cities. More specifically, Katz and Bradley (2013) argue that the combined effects of the Great Recession, and political dysfunction at the Federal level, have forced many cities to craft, test, and implement innovative and progressive ideas. These processes of civic innovation have led to improvements in public schools, regional public transportation, dedication to parks and recreation, and improved access to affordable housing⁴.

Other major U.S. cities, however, have not been as fortunate. The story of Detroit’s bankruptcy and decades-long depopulation is well known, but there are many other examples of cities where a failure of political leadership—and in some cases, outright criminal behavior—have taken a huge toll on public trust, quality of life, and civic engagement.

With political gridlock at the federal level likely to persist into the foreseeable future⁵, in the near term cities will be viewed by many as important laboratories for effecting positive civic change. With leaders in cities and municipal governments assuming greater influence in the life of the average American, we argue that it is important, now more than ever, to understand the basic dynamics of local politics in these communities.

Elections and Existing Research

There is considerable scholarship addressing voter turnout at the state and national levels. Elections held in November of even-numbered years—in particular, Presidential elections—are heavily studied by academics⁶, as well as by news organizations interested in understanding voter characteristics, preferences, and viewpoints across a multitude of sociodemographic indicators⁷. At the same time, the dearth of good research about municipal elections is notable, and striking. The vast majority of municipal elections for mayors of U.S. cities occur in odd-numbered years, often in the spring or summer, and exit polls, if they exist at all, are rarely published.

² The U.S. Census Bureau reports that in 2010, 80.7 percent of Americans resided in urban areas, up from 79 percent in 2000. For more information, see: <http://www.census.gov/geo/reference/ua/urban-rural-2010.html>

³ See: Katz, Bruce and Jennifer Bradley. 2013. *The Metropolitan Revolution: How Cities and Metros Are Fixing Our Broken Politics and Fragile Economy*. Washington, DC: Brookings Institution Press.

⁴ U.S. Census Bureau Annual Population Estimates, 2014.

⁵ See: <http://www.governing.com/columns/mgmt-insights/col-three-keys-breaking-government-gridlock.html>

⁶ Examples include: R.J. Johnston. 1982. “The Changing Geography of Voting in the United States: 1946-1980. *Transactions of the Institute of British Geographers*. 7: 187-204; M.D. Martinez and J. Gill. 2005. “The Effects of Turnout on Partisan Outcomes in U.S. Presidential Elections: 1960-2000.” *Journal of Politics*. 67(4): 1248-1274.

⁷ Voter News Service Election Day Exit Polls [ABS News, Associated Press, CBS News, CNN, FOX News, and NBC News]. Roper Center for Public Opinion Research Version. Lincoln, NE: Gallup organization [producer]. Storrs, CT: The Roper Center, University of Connecticut [distributor].

How do municipal and local elections differ from Presidential and midterm elections, specifically with respect to voter turnout⁸ patterns? Roughly 65–80 and 50–60 percent of registered voters turn out in Presidential and midterm elections, respectively, while fewer than 30 percent of registered voters cast ballots in municipal elections for mayors⁹. More often than not, turnout rates are closer to single digits. When measured against denominators that take into account citizens who aren't even registered in the first place—much less the entire adult population in communities—voter turnout numbers are even lower.

Some scholars in political science have recognized how little we know about turnout at local elections¹⁰. In their 2011 symposium, *The Study of Local Elections: A Looking Glass into the Future*, Melissa Marschall, Paru Shah, and Anirudh Ruhil (p. 1) argue:

“... to say that a field of study on local elections exists would be a bit of an overstatement. Not only is the literature rather small and not particularly cohesive, but the data collection and methods of analysis are also somewhat primitive, particularly compared to research on state and federal elections.”

The academic research gap becomes even more salient alongside three practical reasons for pursuing this research. These include:

1. Nearly half a million elected officials in local governments¹¹ oversee a wide range of core public functions (e.g. police and fire services, drinking water, schools, roads and transportation, solid waste management, etc.). Many of these functions are in dire need of significant capital investment, inevitably pitting public demands for current needs versus future needs in a context of limited public resources.
2. Research has long shown that voter turnout—even in high profile Presidential elections—is highly skewed toward more affluent, highly educated, largely white, non-Hispanic voters. If these trends are even more pronounced in much lower-turnout municipal elections, this has potentially significant implications for how city residents generally view the quality and representativeness of their locally elected officials.
3. Research also reveals that low-turnout elections tend to correlate with poorer outcomes for minority residents, making this a social justice issue as public funds are allocated in arguably a less equitable manner¹².

⁸ See: J. Aldrich. 1993. “Rational Choice and Turnout.” *American Journal of Political Science*. 37(1): 246–278; J. Bingham Powell Jr. 1986. “American Voter Turnout in a Comparative Perspective.” *American Political Science Review*. 80(1): 17–43; Andre Blais. 2006. “What Affects Voter Turnout?” *Annual Review of Political Science*. 9: 111–125; Benny Geys. 2006. “Explaining Voter Turnout: A Review of Aggregate-Level Research.” *Electoral Studies*. 25(4): 637–663.

⁹ See: <http://www.fairvote.org/research-and-analysis/blog/fairvote-report-low-turnout-plagues-u-s-mayoral-elections-but-san-francisco-is-highest/#.UqoBkvRDtrE>

¹⁰ See: C. Wood. 2002. “Voter Turnout in City Elections.” *Urban Affairs Review*. 38(2): 209–231; Alford, R.R. and C.E. Lee. 1968. “Voting Turnout in American Cities.” *American Political Science Review*. 62(3): 796–813.

¹¹ Berry, C., Gersen, J. 2010. “The Timing of Elections.” *The University of Chicago Law Review*. 77(1): 37–64.

¹² Hajnal, Zoltan. 2010. *America's Uneven Democracy: Race, Turnout, and Representation in City Politics*. Boston: Cambridge University Press.

Given that many mayoral elections in the nation's largest cities are also held "off-cycle" (i.e. in odd-numbered years) and typically draw far fewer voters, this report tackles two major research questions across the four cities:

1. To what extent are voters who cast ballots in municipal elections roughly representative—or not—of a city's overall population?
2. Which demographic groups are over or underrepresented at the ballot box, and by how much? Put another way, which demographic groups—and to what degree—play an inordinately large (or small) role in choosing who governs a city?

To help remedy this profound gap in research and broad lack of understanding in the public realm, the Knight Foundation asked a team at Portland State University's (PSU) Population Research Center (PRC) and Center for Public Service (CPS) to develop a methodological and analytical approach that uses both actual voter files and U.S. Census data.

Four cities that elected mayors during the 2012-2013 election cycle—Charlotte, North Carolina; Detroit, Michigan; Portland, Oregon; and St. Paul, Minnesota—were chosen for this pilot phase, for reasons listed in greater detail later in this report. Research questions relating to "Who Votes for Mayor?" were examined through three primary lenses:

- **Geography.** This analysis uses voter turnout data to determine the extent to which voting turnout patterns vary spatially across the 4 cities;
- **Age and Race/Ethnicity.** This analysis uses *individual voter data* available through public records to examine voter turnout rates by age and race/ethnicity (Charlotte only¹³);
- **Socioeconomic Status (SES).** This analysis compares voter turnout patterns with census tract-level data for three key socioeconomic indicators: 1) household income; 2) educational attainment, and; 3) housing tenure.

Executive Summary

Examining the geography of individual-level voting patterns by age, race/ethnicity, and socioeconomic status reveals striking—though in some cases, unexpected—differences within and between the four cities when it comes to who actually casts ballots to elect their mayor.

Geography

Key Finding #1. Voter turnout rates as a percentage of registered voters (RV) vary dramatically across census-tract defined urban neighborhoods. The ratios of the "highest to lowest" turnout rates of RV for census tracts across each city are:

¹³ North Carolina, as one of 6 states subject to certain provisions of the federal Voting Rights Act, is required to list "race" on voter registration cards. While voters cannot be disqualified for failure to fill out this section, compliance is of a sufficiently high level that we were able to draw some valid and interesting conclusions for Charlotte based on the self-identified race/ethnicity of voters.

- Charlotte. 35:1 in the primary election and 27:1 in the general election
- Detroit. 17.5:1 in the primary election 10:1 in the general election
- Portland. 3.2:1 in the primary election, and 2:1 in the general
- St. Paul. 3.5:1 in the general election.

Key Finding #2. After estimating the number of eligible citizens in each jurisdiction who are eligible to vote, but not registered, we calculated a denominator based on a framework known as “Voting Eligible Population” (VEP), which for this report we’ve dubbed “VEP-Lite”¹⁴. Based on our analysis, voter turnout as a percentage of VEP-Lite was less than 50 percent of the citywide average in three jurisdictions (Charlotte, Detroit, and St. Paul). These areas are referred to as “Voting Deserts.” Conversely, census tracts where voter turnout rates are more than double the citywide average are referred to as “Voting Oases.” See Table 2 for more details.

Age and Race/Ethnicity

While voting records do not contain individual socioeconomic data, almost all voter registration records include the voter’s age. It’s long been well known that voting propensity increases with age, as well as other factors (e.g. household income, educational attainment, and rental/housing status). Still, differences in voting across age in these mayoral contests were far more dramatic than what is typically demonstrated in national midterm and (especially) presidential elections.

Key Finding #3. For all but one of seven election contests, the median age of voters was nearly a **full generation** older than the median age of the city’s Voting Age Population (VAP) of adults age 18 and older. The breakdown by city is as follows (from Table 3):

- Detroit: 62 (primary) and 59 (general)—compared to 45.7 VAP
- Charlotte. 59 (primary) and 56 (general)—compared to 41.8 VAP
- St. Paul: 57 (general)—compared to 40.8 VAP
- Portland: 59 (primary) and 49 (general) —compared to 42.3 VAP

By comparison, the median age of voters in the 2014 midterm election was 53, compared to 47 in the 2012 presidential election¹⁵.

¹⁴ The most commonly used VEP methodology, developed by the U.S. Election Project (see: <http://www.electproject.org/methodology>), is only available at the statewide level, and takes several factors into account including state residents living abroad. Our “VEP Lite” calculations only captured the single largest component of this analysis – non-citizens – but did so at both the citywide and the census tract level. To our knowledge, few such “VEP Lite” calculations have been used in other studies, which tend to use either the RV denominator or one based on the entire adult population: Voting Age Population, or VAP. While this report chooses to use the VAP denominator in several cases, (e.g. in looking at age cohorts, where VEP-lite calculations were found to be too difficult) we use the “VEP-Lite” framework whenever possible.

Based on 2009-2013 ACS data, we found relatively little difference between the 4 cities when it comes to the portion of their Voting Age Population (VAP) that are citizens and thus presumptively eligible to register and vote (“VEP Lite”). The lowest portion of VAP that is also VEP Lite was found in St. Paul, at 89.4%. This compares to Charlotte (91.7%); Portland (93.9%); and Detroit (95.8%).

¹⁵ Calculated by PRC from 2014 CNN Election Poll Exit Data (access no longer provided by CNN).

Key Finding #4. Residents age 65 and older were far more likely to cast ballots than their 18-34 year old counterparts.

To examine the difference in voter propensity between voters age 65 and older compared to 18-34 year old voters, we calculated a voter turnout “Odds Ratio”, which refers to the likelihood that a randomly chosen older (age 65 and older) registered voter would cast a ballot, compared to a younger (18-34 year old) voter. In effect, it’s a measure of “electoral clout,” and the extent to which a given voter punches below, at, or above their normal electoral weight, compared to overall voter turnout. With respect to this measure, the Odds Ratios (see Table 4) are:

- Charlotte. 19.0 to 1 in the primary and 13.8 in the general election
- Detroit. 12.9 in the primary and 9.5 in the general election
- Portland. 14.3 in the primary and 7.9 in the general election
- St. Paul. 7.7 in its general election

Our analysis reveals even more pronounced differences in voter turnout Odds Ratios across census tracts. In many census tracts, Odds Ratios of 20-50 to 1 are common, and several Charlotte primary election tracts exceeded 100 to 1. Differences in Odds Ratios can be only partly explained by the non-citizen portion of VAP likely being higher among 18-34 year olds than among voters age 65 and older¹⁶. In the end, our results clearly indicate that in these cities, residents between 18-34 years of age are close to invisible on the electoral landscape.

Key Finding #5. In Charlotte, where voter-specific information is available by race/ethnicity¹⁷, the differences in voter turnout were dramatic—including in some unexpected ways.

- In Charlotte’s primary election, Black/African American residents were actually 1.6 times more likely to vote than White residents, and almost equally as likely to vote in the general election.
- Both White and Black/African American residents voted at rates dramatically higher than all other racial/ethnic groups. Voter turnout rates among White and Black/African American residents were 4 times higher in the general election than among Hispanic/Latino registered voters, and 10 times higher compared to Asian registered voters.
- Taking into account the apparently far lower rates of voter registration among the Hispanic/Latino and Asian residents, Charlotte’s Black/African American

¹⁶ If VAP-based turnout of the 65 and older cohort is 20%, and the VAP-based turnout of the 18-34 cohort is 2%, the ratio would be calculated at 10:1. Assuming that just 4% of the 65 and older VAP cohort is ineligible to vote due to non-citizen status, while 20% of the 18-34 cohort is ineligible, the VEP-Lite based turnout rates change to 20.8% and 2.5% respectively. This would reduce the ratio from 10:1 to 8.4:1.

¹⁷ NC Voter Registration form is available here: <https://www.ncsbe.gov/ncsbe/Voter-Information/VR-Form>

and White residents exercised about 20 times the electoral clout compared to Hispanic/Latino or Asian residents¹⁸.

These voting results tell a powerful story—despite generally lower socioeconomic indicators common to Charlotte’s Black/African American population, the level of civic commitment, as reflected in voting behavior—especially among older residents—is more powerful than underlying socioeconomic indicators might suggest.

Socioeconomic Status (SES)

Key Finding #6. Although age appears to be—far and away—the most powerful factor correlated with voter turnout, examining voting turnout rates by age cohort according to three key SES characteristics (household income, educational attainment, and homeownership/rental status) reveals that even in the most affluent neighborhoods, 18-34 year old voters cast ballots at significantly lower rates compared to residents age 65 and older living in the poorest areas.

Key Finding #7. Clear patterns emerge from SES-based data, which show how much these factors are correlated with different levels of voting behavior, and the extent to which they vary between the cities.

- In Charlotte, overall voter turnout was relatively flat, regardless of whether a census tract’s median household income (MHI) is \$50,000 or \$150,000. In contrast, in Detroit, overall voter turnout in census tracts with at least \$60,000 MHI was double what it was in tracts with \$30,000 MHI.

¹⁸ Another factor worth noting is that the May 2012 Democratic primary was dominated by several black candidates for mayor that together targeted mobilizing Charlotte’s African-American community.

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Study Overview

The four cities chosen for this study—Charlotte, North Carolina; Detroit, Michigan; Portland, Oregon; and St. Paul, Minnesota—were selected for several reasons. First, the first three cities are Knight cities, allowing this pilot to supplement a large body of other, existing research.

Second, among the four cities, there are three different election systems, allowing some analysis based on these differentials.

- Charlotte uses a “partisan” system where voters must decide to participate in a first-round “primary” election to select Democratic and Republican party nominees.¹⁹ Charlotte held its first round, primary election on September 10, 2013, where Democratic nominee Patrick Cannon secured the nomination and went on to defeat Republican nominee Edwin Peacock in the November 5, 2013 general election.
- Detroit and Portland use a non-partisan system, in which all voters are eligible to participate. All candidates are listed on the ballot. If one receives 50 percent or more of the first-round, primary election vote, he/she is elected. Otherwise, the top-two vote getters advance to a second round, “run-off” or general election.
 - Detroit held its primary on August 6, 2013. Since no candidate won a majority, the top vote getters—Mike Duggan and Benny Napoleon—advanced to the November 5, 2013 general election, which Duggan won. Portland held its primary on May 15, 2012, coinciding with its regular primary election that also featured races for U.S. President, U.S. Congress, and several statewide offices. The two top vote getters, Charlie Hales and Jefferson Smith, advanced to the November 6, 2012 general election (also coinciding with the national presidential election), where Hales prevailed.
- St. Paul—along with Oakland, CA, San Francisco, CA, and Cambridge, MA—is one of the few U.S. cities to use a “ranked choice” or “instant run-off” voting system. As in non-partisan elections, all voters are eligible to cast a ballot, but there is only a single election. Voters can express their support for multiple candidates in “rank order”(i.e. 1st choice, 2nd choice, etc.). As the lowest vote-getting candidates are eliminated in successive rounds of counting, the remaining candidates are assigned their votes according to these choices, until one candidate receives more than 50 percent.

The third reason involved election timing. Three of these four elections were held “off cycle” (odd numbered years) when the mayor’s race was typically one of the few races on the ballot. This is typical of most mayoral contests. Of the nation’s 50 largest cities, more than three-quarters of them are held in odd numbered years. Most of these odd-year elections were also non-partisan elections—and in about half the cases, a winning

¹⁹ North Carolina does not register its voters by party affiliation; any registered voter can choose to participate in either the Democratic or the Republican primary. But Charlotte traditionally leans heavily to Democratic candidates in partisan elections; accordingly, many would argue that winning the Democratic nomination in this first, primary election round is tantamount to eventual victory in November.

candidate received more than 50 percent of the vote in the first round primary election, eliminating the need for a second contest.

The fourth reason involved voter turnout and getting a wide range of results. The three odd-year election cities saw relatively low voter turnout—ranging from just 6.9 percent of RV in Charlotte’s primary to a high of 24.2 percent in Detroit’s general election. This too, is fairly typical; voter turnout as a percentage of registered voters seldom exceeds 30 percent in mayoral elections.

Adding Portland to this mix served several additional goals. Portland’s first-round, primary election (May 2012) was relatively similar to the other three in terms of low turnout. In Portland’s case, 34.2 percent of registered voters cast a ballot, which allows potentially useful comparisons that involve Portland’s unique vote-by-mail system. However, in Portland’s general election, roughly 72.3 percent of Portland’s registered voters cast a ballot, which is the highest participation rate among the nation’s top 50 mayoral elections in the 2012-2013 cycle.

Of course, all elections boast their own unique characteristics, and what portion of a city’s population casts a ballot in a given election depends on multiple factors. Are there many, or just a few, candidates seeking office? Is the race considered competitive, or is one popular candidate widely considered a shoo-in? Is there a lot of television advertising and other campaign spending, or do many voters not even know an election is taking place? Do all voters—especially in racially and ethnically diverse communities—feel represented by at least one credible candidate, or is the contest seen as favoring one or more groups over others?

Accordingly, this analysis makes no effort to assess the potential causes of *how many votes* were cast among the seven different contests (primary and general elections in Charlotte, Detroit, and Portland, and the St. Paul general election), but rather focuses simply on *who* among each community’s residents cast a ballot, and what we might learn about who they actually are.

Research Design and Methodology

Overview

To explore voting patterns in Detroit, Portland, and St. Paul, we first collected voter registration and election history data for the mayoral primary (“first round”, where applicable) and “second round” general elections (2012-2013) from election officials. Voting data were gathered from the respective Secretary of State offices for three of the

cities (Michigan²⁰, Oregon²¹, and Minnesota²²), and for Charlotte, the Mecklenburg County Board of elections²³. For each city, these election data included the voter's address, age, registration status, and whether they voted in a given election. For Charlotte, the data also included each individual's stated race/ethnicity²⁴.

After obtaining complete voting records from each jurisdiction, we “geocoded” voters to their individual residential voting address. The utility of this approach is three-fold: 1) it allows us to cross-reference voter turnout with census data at small-area geographies (e.g. neighborhoods); 2) it provides a spatial representation of voter turnout, and; 3) it allows us to calculate Voting Age Population (VAP) and a version of Voting Eligible Population (VEP), which adjusts VAP numbers by accounting for non-eligible adults, for example. These statistics are calculated at the city-level and neighborhood-proximate areas, which are particularly useful denominators in this study since the accuracy of voter registration data varies widely between jurisdictions.

One important caveat specific to the election data presented here is that although our focus was the 2012-2013 primary and general election data, the voting data available from each jurisdiction instead reflected the current registration realities (2015). Since population changed during the intervening 2-3 year period, there are some unavoidable discrepancies between some numbers published during the 2012-2013 election cycle, and our numbers. For example, voters who cast ballots in the 2012/2013 elections, but then died or moved to another jurisdiction might have been (should have been) removed from the voter rolls. Similarly, registered voters as of 2015 might have still been city residents in 2012-2013 or they might have moved recently from another jurisdiction.

This ‘temporal mismatch’—combined with a wide variance in the quality and accuracy of voter registration rolls—creates several challenges for this kind of analysis. For example, some sub-areas in Detroit show a higher number of registered voters compared to the total number of residents (citizens and non-citizens) 18 years and older, most likely due to large population outflows during the last few years. Similarly, because our analysis relies on the *current* addresses of registered voters, the data would not capture the location of those city voters who had voted at one address in 2012-2013, and then had moved and registered somewhere else.

To some extent, these temporal mismatches are inevitable, especially given the widely different quality of voter registration records. However, the research team also concluded that, given the overall purposes of the study, although the “give and take” of such movements are slightly different from the official tabulated results, in general the

²⁰ Data for Detroit was obtained from the Qualified Voter File (QVF) (http://www.michigan.gov/sos/0,4670,7-127-1633_11976_12001-27157--,00.html) and from Data Driven Detroit.

²¹ Data for Portland was obtained from the Statewide Voter List from the Oregon Secretary of State Elections Division <http://sos.oregon.gov/elections/Documents/SEL510.pdf>

²² Data for St. Paul was obtained from the Minnesota Secretary of State: <http://www.sos.state.mn.us/index.aspx?page=893>

²³ Charlotte data was obtained from: <http://charmeck.org/mecklenburg/county/BOE/data/Pages/VoterDataFileDetails.aspx>

²⁴ North Carolina is one of a handful of states nationally requiring voters provide their race/ethnicity as a part of voter registration (but cannot deny those who choose to not self-identify): <http://www.eac.gov/assets/1/1/Page/National%20Mail%20Voter%20Registration%20Form%20-%20English.pdf>

differences are small and do not materially affect the findings presented in this report²⁵. However, we do recommend that any follow up research attempt to minimize the temporal mismatch by choosing elections closer to the current registration date, or ensure that an elections office can provide accurate and complete historical individual election data files²⁶.

Measuring Voter Turnout

The most common denominator used by election officials and journalists to calculate voter turnout is to divide the number of ballots cast in a given election by the number of registered voters. Hence, we begin our analysis by examining turnout as a percentage of registered voters, which we refer to as Registered Voter turnout (RV).

In recent years however, research has demonstrated the upside of measuring voter participation rates with a different denominator—recognizing that voter registration itself is a highly selective process. Many eligible citizens do not register to vote, and many adult residents legally can't vote—the most common reason being the individuals are not U.S. citizens. To address these issues, where possible we present and analyze voter turnout statistics and rates using two other measures: 1) Voting Age Population (VAP), which is simply the number of adult residents age 18 and older (these values are relatively easy to obtain through U.S. Census Bureau data, but obviously have the limitation of including non-citizens who are ineligible to vote)²⁷, and; 2) arguably the best denominator is based on a calculation of the Voting Eligible Population (VEP). The U.S. Election Project²⁸ calculates VEP values for all 50 states, through a methodology that excludes two major subpopulations: 1) non-citizen residents, who by law cannot vote, and; 2) citizens barred from voting due to criminal behavior²⁹. A third adjustment then calculates and adds back those state residents who are temporarily living outside what they consider their “home” jurisdiction (e.g. military personnel, college students, and those living overseas).

In this analysis, we employ what we call a “VEP-Lite” calculation—at the citywide and census tract levels—that only excludes the number of non-citizen residents³⁰.

Unfortunately, each city's banned felon population and non-resident citizen population proved too difficult to calculate with sufficient accuracy, preventing perfect alignment with state-level VEP data published by the U.S. Election project. That said, to our knowledge these “VEP Lite” calculations at the citywide and census tract level break new analytical ground, as previous research on local election turnout uses either RV or VAP as denominators.

²⁵ Small differences between the number of registered voters and the actual number of residents across small area geographies will most certainly affect the calculated odds ratios (see the Analysis section for more details). For example, instead of a census tract having a “true” value of a 50-1 odds ratio, the data we obtained from elections officials might yield odds ratios that are +/-1 to +/-5 points different. In the end, these differences are not likely to materially change the observations and conclusions highlighted in this report.

²⁶ Based on conversations with elections officials in Charlotte, Detroit, and St. Paul, because election history is wholly contained with voter registration databases, it is difficult, if not impossible, for most elections officials to provide historical individual election data files.

²⁷ VAP is a relatively straightforward calculation in that it includes all resident individuals over 18 years of age.

²⁸ For more information on national and state-level VEP estimates, see the U.S. Election Project at: <http://www.electproject.org>

²⁹ State laws here vary widely; some exclude convicted felons only during their time in prison while others apply lifetime bans.

³⁰ This is far and away the largest component of a VEP calculation.

We then compared our VEP-Lite estimates to the Citizen Voting Age Population³¹ (CVAP) special tabulation from the U.S. Census Bureau's 2009-2013 ACS dataset as a reasonableness check. One of the chief advantages of the CVAP file is that the data provide the population of individuals 18 years and older by citizenship status and race/ethnicity at various levels of geography, including small-area geographies like census tracts and block groups³².

Census Data

The decennial U.S. Census is the largest and primary source of social, economic, and demographic data, particularly for small-area geographies. Through Census 2000, the U.S. Census Bureau administered two different surveys to collect data: short and long forms. In Census 2000, 5 out of 6 households received the short form, which contained approximately ten questions gathering data for: age, gender, race/ethnicity, and housing relationship/tenure. In addition to these ten questions, the long form surveyed 1 of 6 households asking more detailed social, economic, and housing-specific questions.

Since 2005, the U.S. Census Bureau has implemented the American Community Survey (ACS) on a continuous basis (replacing the decennial long form) in an effort to provide users with timelier sociodemographic data. The availability of timelier data, however, comes with limitations. One of the chief drawbacks of the ACS is a greatly reduced sample size. Where the long form sampled approximately 15 percent of the U.S. population, the effective sampling rate of the ACS during the 2009-2013 period was 1.5 percent annually. Consequently, ACS data contain margins of error (MOE)³³ that sometimes affect the reliability of estimates, specifically for small-area geographies and cross-tabulated data.

Geographic Units of Analysis

According to the U.S. Census Bureau geographical hierarchy, the smallest unit of analysis is the census block, which contains approximately 300-500 people. The next largest geographic unit is a census block group, which is an aggregation of census blocks, and on average contains 1,500 people. The aggregation of census block groups nests completely within census tracts, which are relatively permanent census geographies containing roughly 2,500 to 8,000 people. Our analysis in Charlotte is based on 179 census tracts; Detroit with 289 census tracts; Portland with 134 census tracts; and St. Paul with 130 census tracts.

Census geographies are particularly germane to the availability of ACS data. Census tract-level analysis, as well as analysis of other geographic areas containing less than 20,000 persons, is possible only through the five-year combined ACS datasets (e.g. 2009-2013).

³¹ For more information on the CVAP file, see:

https://www.census.gov/rdo/data/voting_age_population_by_citizenship_and_race_cvap.html

³² Also relevant, the estimates include both the population living in housing units, as well as individuals living in group quarters facilities, such as college dorms.

³³ Both ACS and CVAP data from the U.S. Census Bureau contain corresponding Margin of Error (MOE), which the bureau reports at a 90 percent statistical confidence level. Although MOE values should be, and typically are reported alongside the ACS and CVAP estimates, in this report we do not report MOE values. As such, we employ larger geographic units of analysis (i.e. census tracts), which contain lower MOE values than smaller census geographies (e.g. block groups).

Because data for smaller census geographies or smaller populations generally contain higher Margin of Error (MOE) figures, census tracts generally serve as the primary unit of analysis in our report.

While our voter data are largely limited to voters within city boundaries, the census tracts that form the basis of our analysis are less well defined. For instance, tract boundaries fit well into the city boundaries of Detroit and St. Paul, but both Charlotte and Portland's boundaries meander through many census tracts, effectively splitting numerous tracts at the cities' edges. In these cases, we chose to only include tracts with at least 80 percent of the population living within the city limits³⁴. It is worth noting this approach skews the results to a small degree. As such, future research should delve more deeply into this issue and make appropriate methodological adjustments.

Spatial Inference Issues

An important aspect of census tract-level analysis is that smaller subareas are often masked due to the Modifiable Areal Unit Problem (MAUP). For example, a tract with very high poverty rates gives the impression that this rate applies to the whole area, but some parts of the tract may exhibit considerably different rates than another part of the same tract. One of the key geographical challenges to this research involves carefully navigating MAUP and other ecological inference issues, which refers to the assumption that all individuals in a group (or geography) share the characteristics of the group (or geography). For example, in this study, although our analysis begins with individual voting records—making it tempting to ascribe dominant census data characteristics to members of the subgroup within that geography that votes—it's important to recognize that census data are aggregated to larger geographies, which prevent us from ascribing aggregate-level characteristics to individual voters. Consequently, we are careful to only report the characteristics of the census geographies (where appropriate) in the analysis.

Location Quotients and Odds Ratios

In order to compare smaller geographies' voting patterns to the overall city-level trends, we employed location quotients. Location quotients are often used to compare the concentration of persons in a particular subgroup in a set of geographic units to the concentration of persons in a larger study area³⁵. For our analysis, we employed location quotients to examine the patterns of voter turnout in reference to our "VEP Lite" approach, across census tracts relative to the city as a whole. Values close to 1.0 indicate that voter turnout is comparable to the city average, while values above and below 1.0 indicate the turnout is higher and lower than the city average, respectively. For example, if a census tract has a location quotient of 1.5, this indicates that voter turnout (as a percentage of VEP Lite) is roughly 150 percent of the city average.

³⁴ We calculated this percentage by aggregating census blocks.

³⁵ Location quotients are calculated as: $Q_i = (S_i/S^*) / (P_i/P^*)$, where Q is the location quotient, i refers to the specific geographic unit of analysis, * refers to the city as a whole, and S and P refer to voter turnout and Voting Eligible Population (VEP), respectively.

To provide context for the different turnout propensities between younger and older voters across census tracts, we employ two methods. The first is known as odds ratios³⁶, which in this report simply reflects the turnout odds of individuals aged 65 and over compared to individuals 18-34 years of age. The second simply compares voter turnout rates to each other. For example, if voter turnout is 20 percent among one demographic group (e.g. for every 100 city residents 65 and older, 20 of them cast ballots) and 2 percent among a second group (e.g. for every 100 city residents 18-34, just 2 cast ballots) the “Voter Turnout Rate Differential” would be 10:1.

Results and Analysis

One challenge to examining voting patterns across the four cities is the timing of the elections. Because the four cities’ elections are held in different years—three “off cycle” in 2013, and Portland’s in 2012, which coincided with the Presidential election—the electorates are different, which limits our ability to make useful comparisons in voter turnout across all four cities. That said, in most elections, voter turnout is consistently skewed in that voters rarely come close to representing the sociodemographic makeup of the city at large.

Our analysis of voting patterns³⁷ in Charlotte, Detroit, Portland, and St. Paul suggests that in every community, more affluent census tracts (e.g. those characterized by significant higher household incomes, educational attainment levels, and/or higher rates of homeownership) are disproportionately represented compared to economically stressed and higher minority census tracts. While this is not a particularly novel finding, the results do call attention to and contextualize the degree of underrepresentation across particular urban subareas, as well as across particular population subgroups.

Voter Turnout (RV)

As shown in Table 1, voter turnout as a percentage of registered voters (RV) in the three mayoral primaries (St. Paul only held a general election) was 7 percent in Charlotte, 17 percent in Detroit, and 34.2 percent in Portland. Turnout in the second-round elections was significantly higher compared to the primary rates in Charlotte (19.2 versus 6.9 percent) and in Portland (72.3 versus 34.2 percent), but only slightly higher in Detroit (24.2 versus 17.1 percent). St. Paul’s turnout in its general election (19.9 percent) was in line with the Charlotte and Detroit general elections, but less than one-third of the turnout rate in Portland’s general election. Portland’s November 2012 general election for mayor also included the presidential election, which on its own largely explains the city’s high voter turnout.

³⁶ For more information on odds ratios, see: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2938757/>

³⁷ We recognize that differences in electoral results across cities are also the product of place-specific characteristics of each election (i.e., the competitiveness of the primary/general election, the candidate personalities, when the election was held, etc.).

Table 1. Voter Turnout (RV) by Tract and City for Primary and General Elections, 2012 and 2013

	Primary Election				General Election			
	Low Tract	High Tract	Median Tract	Citywide	Low Tract	High Tract	Median Tract	Citywide
Charlotte	0.5%	17.3%	6.1%	6.9%	1.6%	43.5%	17.0%	19.2%
Detroit	2.9%	51.2%	14.7%	17.1%	5.3%	55.1%	21.7%	24.2%
Portland	17.2%	55.7%	32.5%	34.2%	43.9%	86.3%	72.9%	72.3%
St. Paul	-	-	-	-	9.4%	34.0%	17.9%	19.9%

Source: U.S. Census Bureau, ACS 5 year estimates 2009-2013, Mecklenburg County Board of Elections, Michigan, Minnesota, and Oregon Secretary of State Offices. Analysis by PSU.

Note: Turnout is recorded as calculated by PSU. Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city). St Paul did not have a Mayoral primary election.

Perhaps more interesting than the overall voter turnout³⁸ numbers is the extent to which voter turnout varies by census tract. Due to the overall low primary turnout in Charlotte and Detroit, there is little spatial clustering across census tracts (Figures 1 and 3). However, there are more prominent patterns of turnout clustering across neighborhoods in each city's general (or second-round) elections. In Charlotte's second-round election (Figure 2) for example, anywhere from 25-45 percent of registered voters turned out to vote in census tracts in South Charlotte (the Myers Park and South Park neighborhoods), while fewer than 1 in 6 of registered voters punched their ballots in many of the predominantly African American neighborhoods of West Charlotte.

Similar patterns are exhibited in Detroit and St. Paul. As Figure 7 shows, registered voters who resided in more affluent areas of western St. Paul such as Macalester-Groveland and Summit Hill, and St. Anthony Park cast their ballots at more than twice the percentage rate of the registered voters who lived in East St. Paul neighborhoods such as Payne-Phalen.

Here are the ratios of the "highest to lowest" turnout rates of *registered voters*, between the highest and lowest census tracts in each city:

- Charlotte: 35:1 in the primary election, and 27:1 in the general election
- Detroit: 17.5:1 in the primary election, 10:1 in the general election
- Portland: 3.2:1 in the primary election, and 2:1 in the general
- St. Paul: 3.5:1 in the general election.

³⁸ Because the percentages vary across cities, we hold the scale constant across the three geographies to allow for equal comparisons across census tracts in Figures 1-3.

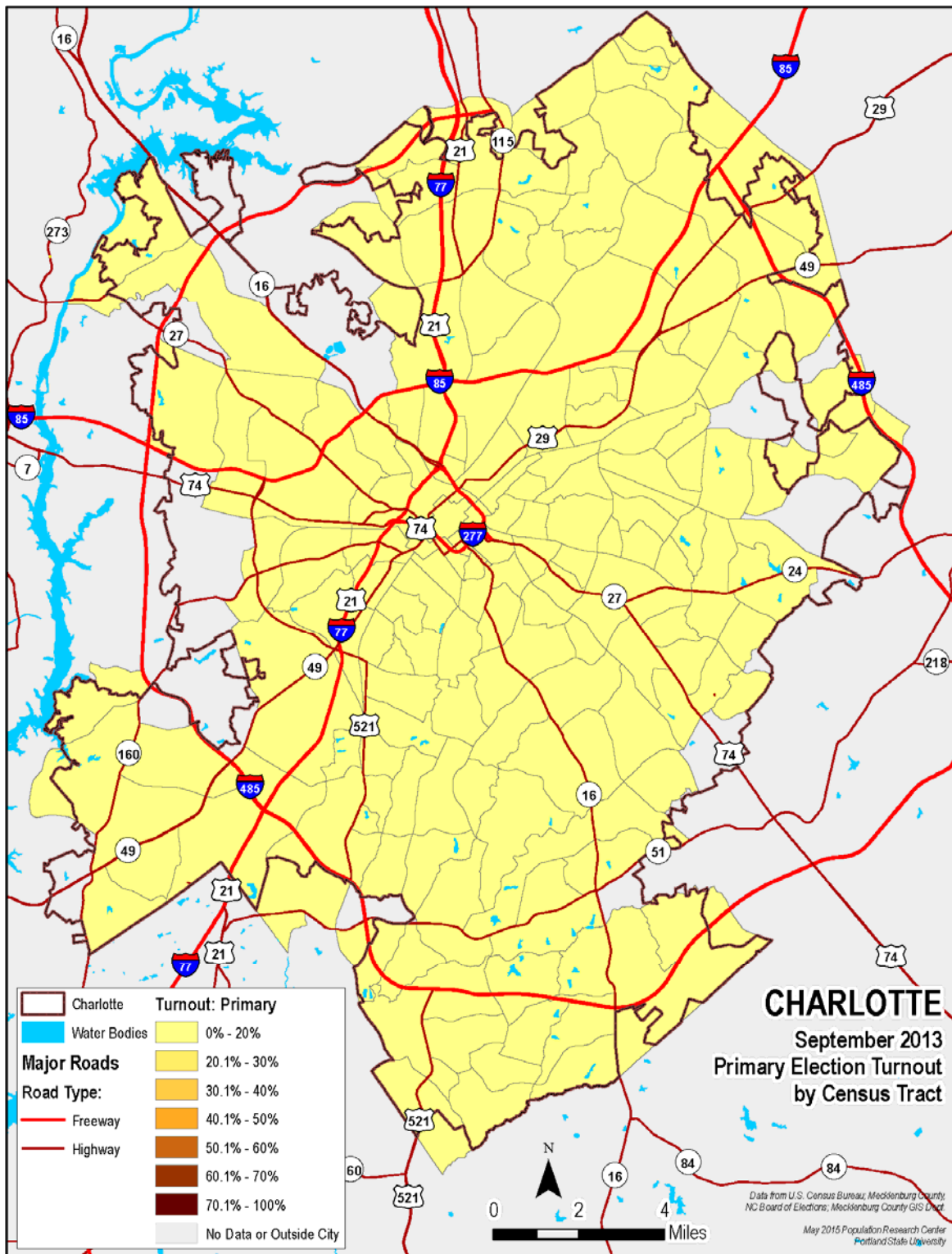


Figure 1. Primary Election Turnout as a Percentage of Registered Voters. Charlotte, NC.

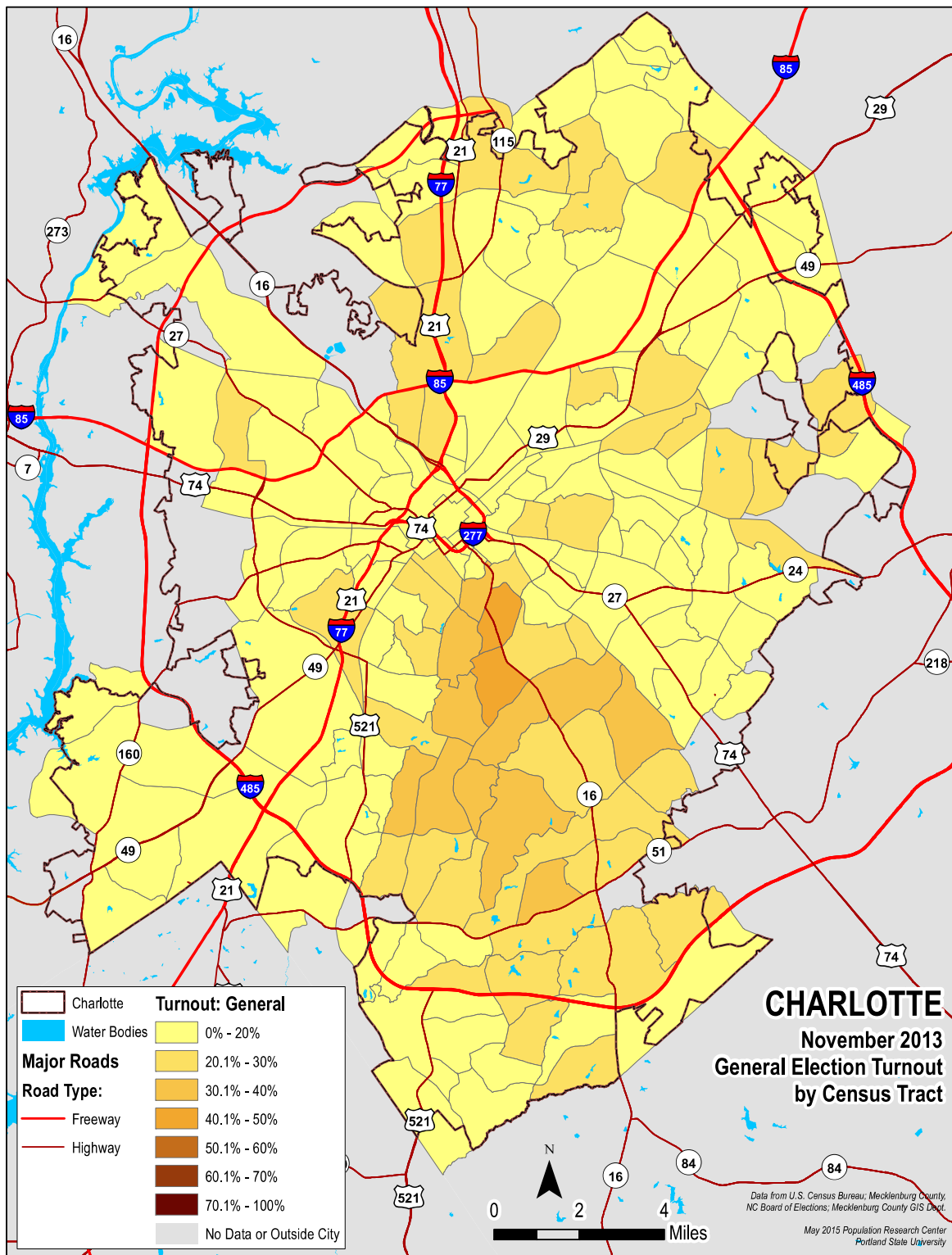


Figure 2. General Election Turnout as a Percentage of Registered Voters. Charlotte, NC.

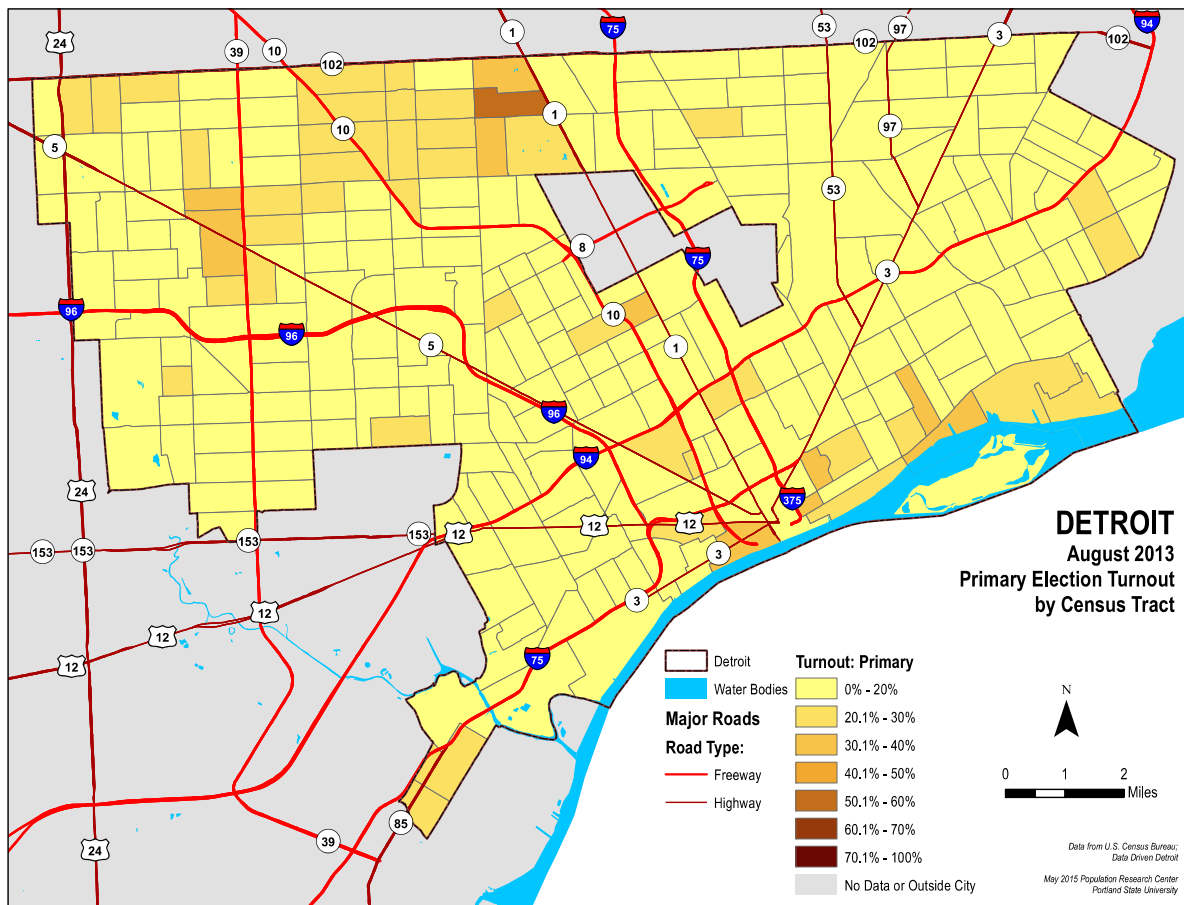


Figure 3. Primary Election Turnout as a Percentage of Registered Voters. Detroit, MI.

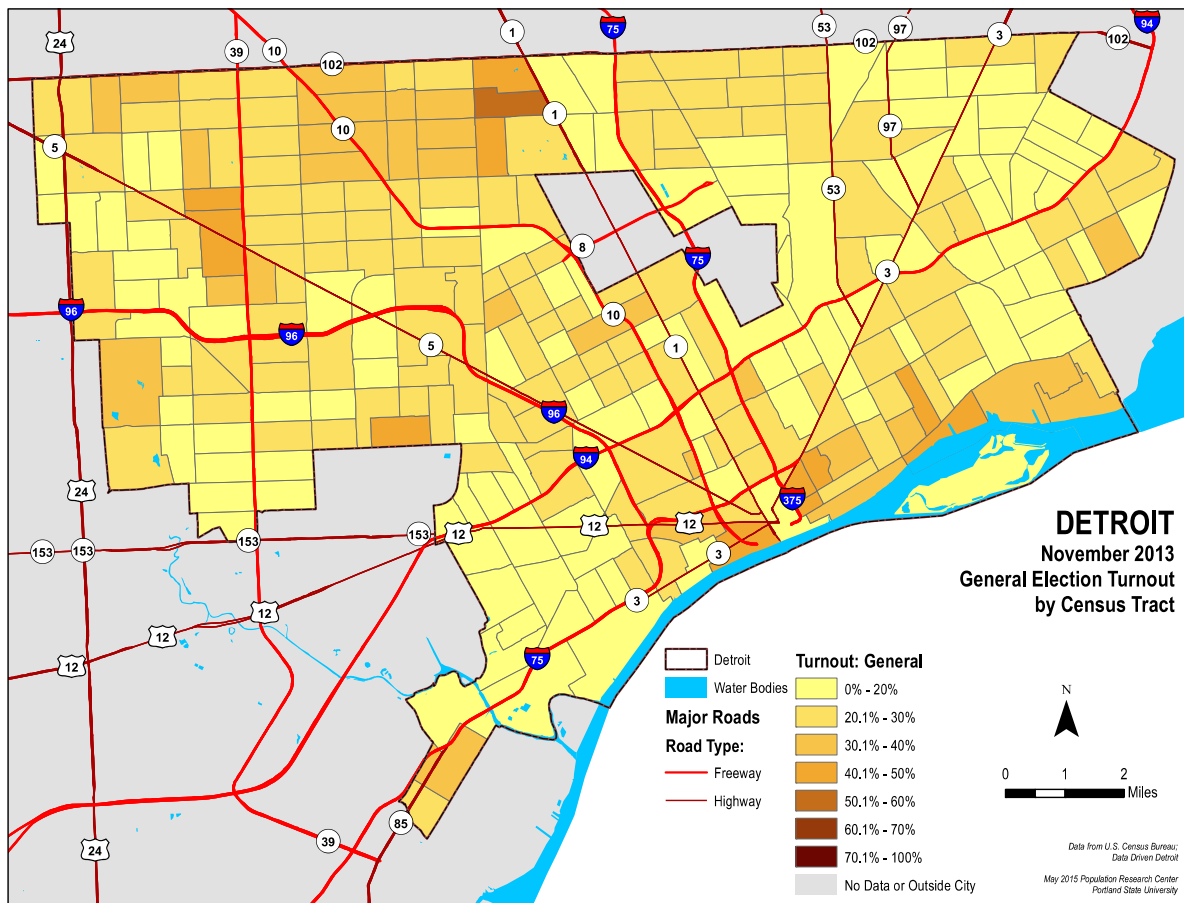


Figure 4. General Election Turnout as a Percentage of Registered Voters. Detroit, MI.

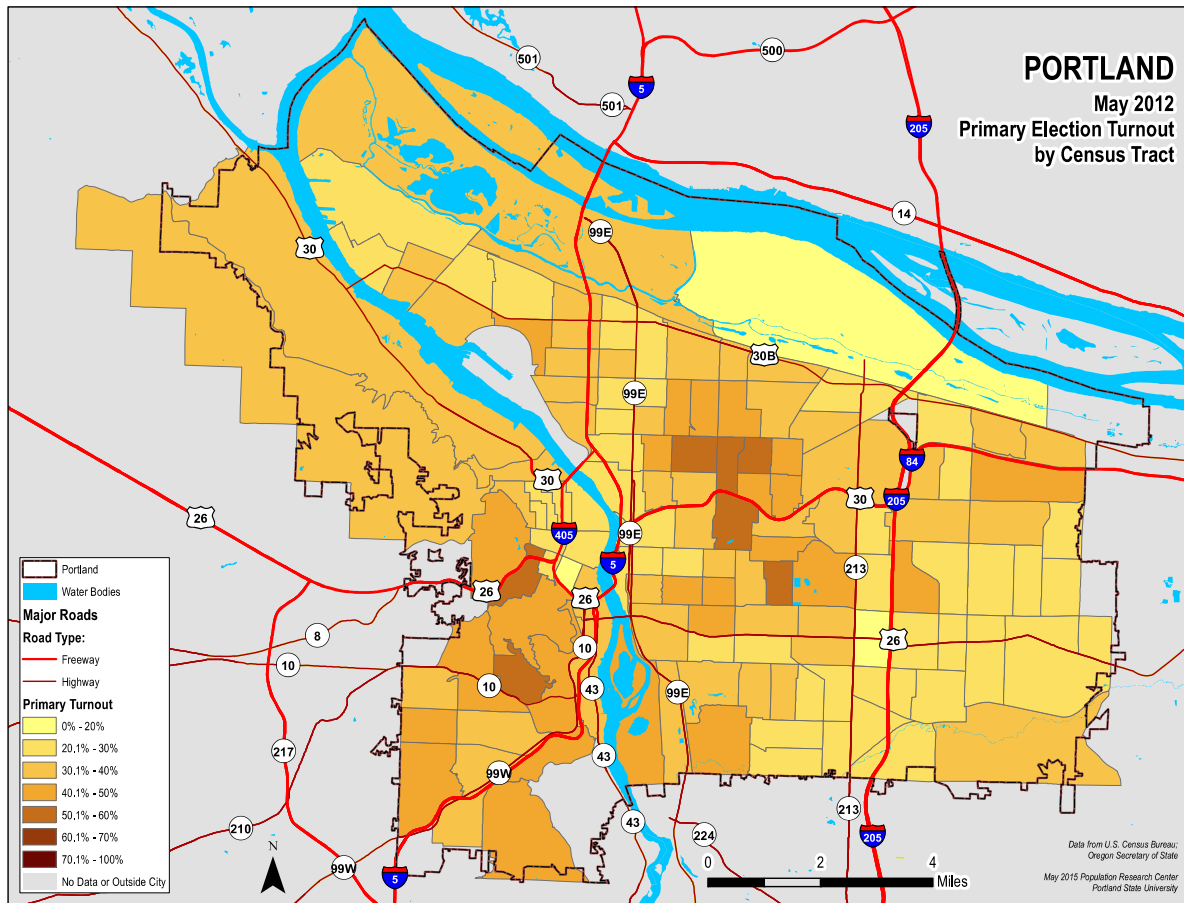


Figure 5. Primary Election Turnout as a Percentage of Registered Voters. Portland, OR.

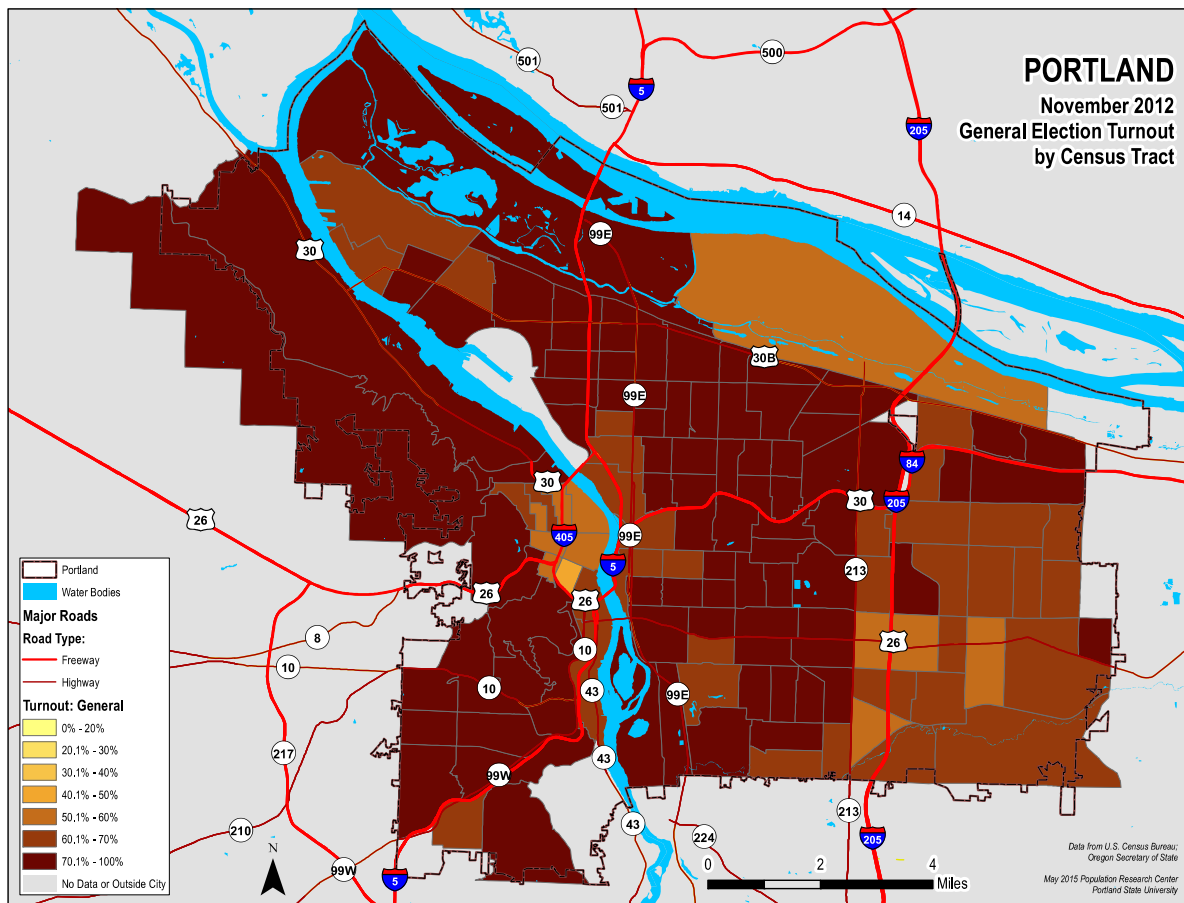


Figure 6. General Election Turnout as a Percentage of Registered Voters. Portland, OR.

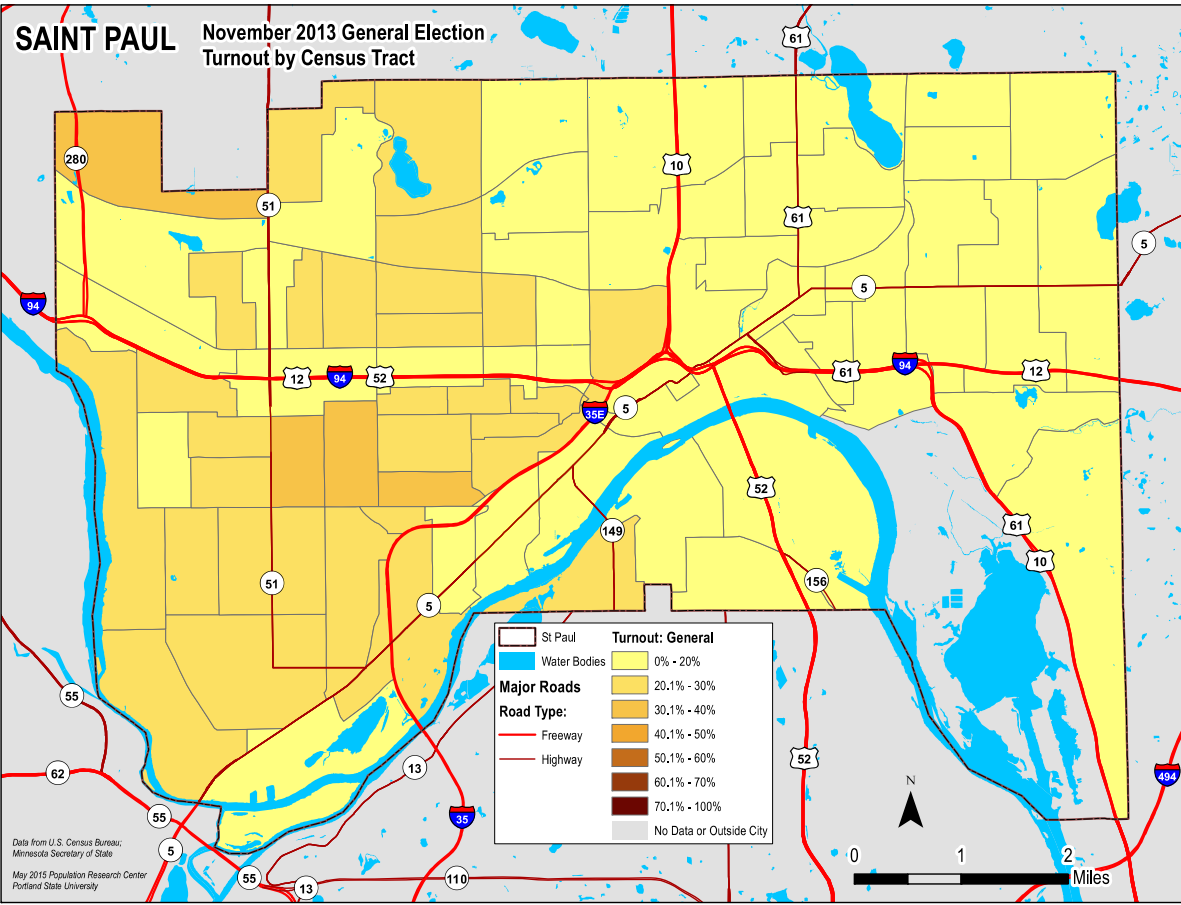


Figure 7. General Election Turnout as a Percentage of Registered Voters. St. Paul, MN.

Cross-referencing high-turnout census tracts with socioeconomic data confirms patterns exhibited in national and state-level analyses—spatial clustering of high-turnout tracts is highly correlated with race/ethnicity, educational attainment, and income. While this pattern holds for Portland as well, spatial clustering is more prominent in the primary (May 2012) than in the second round election (November 2012). This is likely because the voter turnout in May is skewed and more closely resembles the off-year electorate in the other cities.

Voter Turnout (VEP-Lite)

Instead of analyzing voter turnout as a percentage of registered voters, to explore voter turnout more thoroughly we made two key adjustments: 1) calculated voter turnout using VEP-Lite as the denominator, and; 2) employed location quotients to express the degree to which turnout in subareas (i.e. census tracts) deviated from the city average.

Figures 8-10 and 11-14 illustrate turnout patterns for the primary and second round elections, respectively. The strength of this analysis, particularly for primary elections, is the ability to emphasize the degree of under and over representation of VEP within individual census tracts, compared to the city average. Figure 9 reveals that the density of voter turnout from neighborhoods in South Charlotte was at least one-and-a-half to more than twice³⁹ the city average for the November 2013 election. At the same time, West Charlotte and East Charlotte recorded voter density rates hovering around 60 to 75 percent of the city average, respectively. Similarly low turnout levels are displayed in Hispanic neighborhoods in Southwest Detroit (Figure 11), more racially diverse areas of East Portland (Figure 13) and East St. Paul and West St. Paul⁴⁰ (Figure 14).

Compared to the second round elections, primaries typically attract a smaller and more exclusive set of voters. In the primary mayoral elections in Charlotte (Figure 8), Detroit (Figure 10), and Portland (Figure 12), the most striking difference is the shockingly low turnout density in more racially diverse and disadvantaged neighborhoods. In Detroit for example, voter turnout density across Hispanic neighborhoods in Southwest Detroit generally ranged from 20 to 40 percent of the city average. Meanwhile, Charlotte⁴¹ had 3 tracts with turnout density values in the 20 to 40 percent range, while Portland had zero low turnout density tracts. In the end, our analysis shows that using VEP-based location quotients to examine voter turnout more accurately reflects and highlights the remarkable disparity between low and high-turnout neighborhoods.

Finally, to better understand the specific characteristics of consistently low and high turnout tracts, we report the statistics in Table 2 for “Voting Desert” tracts (tracts with

³⁹ Census tracts due south of uptown Charlotte west of NC State Highway 16 have turnout values ranging between 2.25 to 2.52.

⁴⁰ West St. Paul is the neighborhood of St. Paul directly south and across the river from downtown, which is not to be confused with western St. Paul.

⁴¹ Based on our analysis, Figure 8 shows Charlotte had 3 tracts with turnout 20 to 40 percent of the city average (we exclude the 3 tracts in Northeast Charlotte, which are almost certainly a product of students enrolled at UNC-C) and Figure 8 shows Portland with 1 tract in the 20 to 40 percent turnout range.

voter turnout less than 50 percent of the city average) and “Voting Oases” (tracts with more voter turnout exceeding twice the city average).

Table 2. Voter Turnout (VEP-Lite) for “Voting Deserts” and “Voting Oases”

	Number of Census Tracts	Number of Census Tract "Voting Deserts"	% of City VAP Population Living in Voting Deserts	Number of Census Tract "Voting Oases"	% of VAP Population Living in Voting Oases
Charlotte Primary	179	21	11.5%	12	6.6%
Charlotte General	179	15	7.0%	6	3.6%
Detroit Primary	293	33	11.9%	11	3.7%
Detroit General	293	30	10.5%	5	1.6%
Portland Primary	135	5	4.1%	-	0.0%
Portland General	135	-	0.0%	-	0.0%
St. Paul General	81	20	23.4%	2	2.7%

Source: U.S. Census Bureau, ACS 5 year estimates 2009-2013, Mecklenburg County Board of Elections, Michigan, Minnesota, and Oregon Secretary of State Offices. Analysis by PSU.

Note: Turnout is recorded as calculated by PSU. Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city). St Paul did not have a Mayoral primary election.

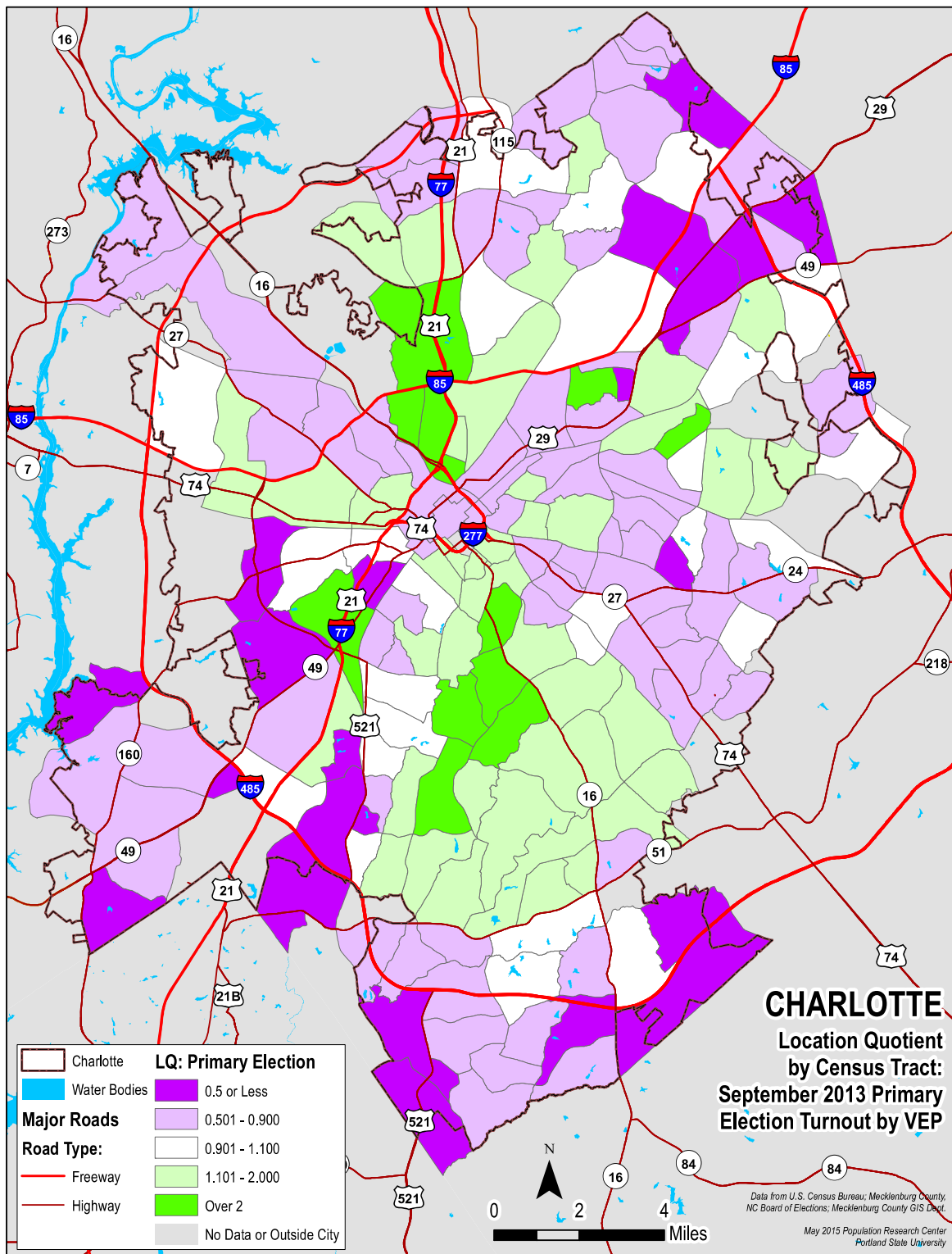


Figure 8. Primary Election Turnout as a Percentage of VEP with Location Quotients. Charlotte, NC.

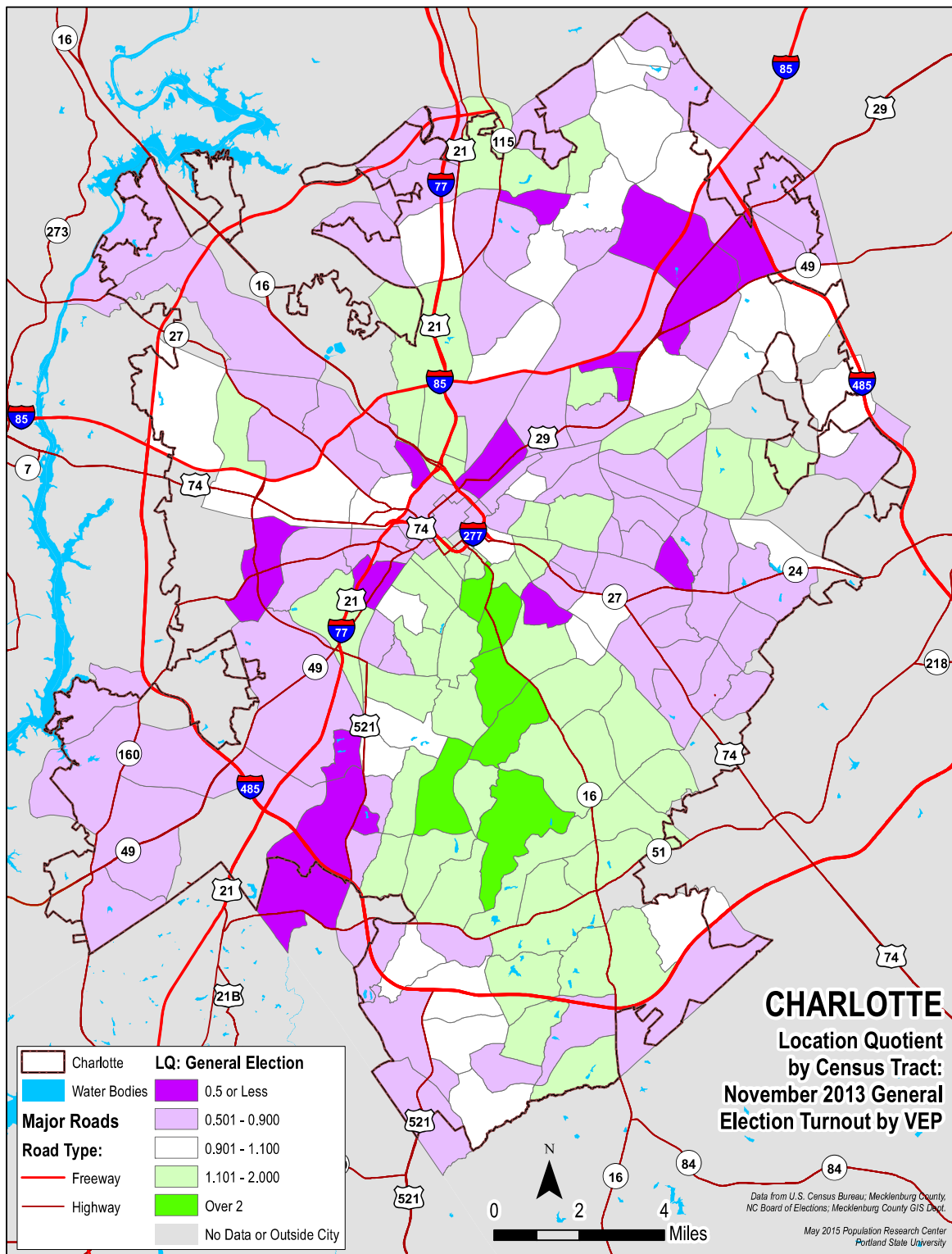


Figure 9. General Election Turnout as a Percentage of VEP with Location Quotients. Charlotte, NC.

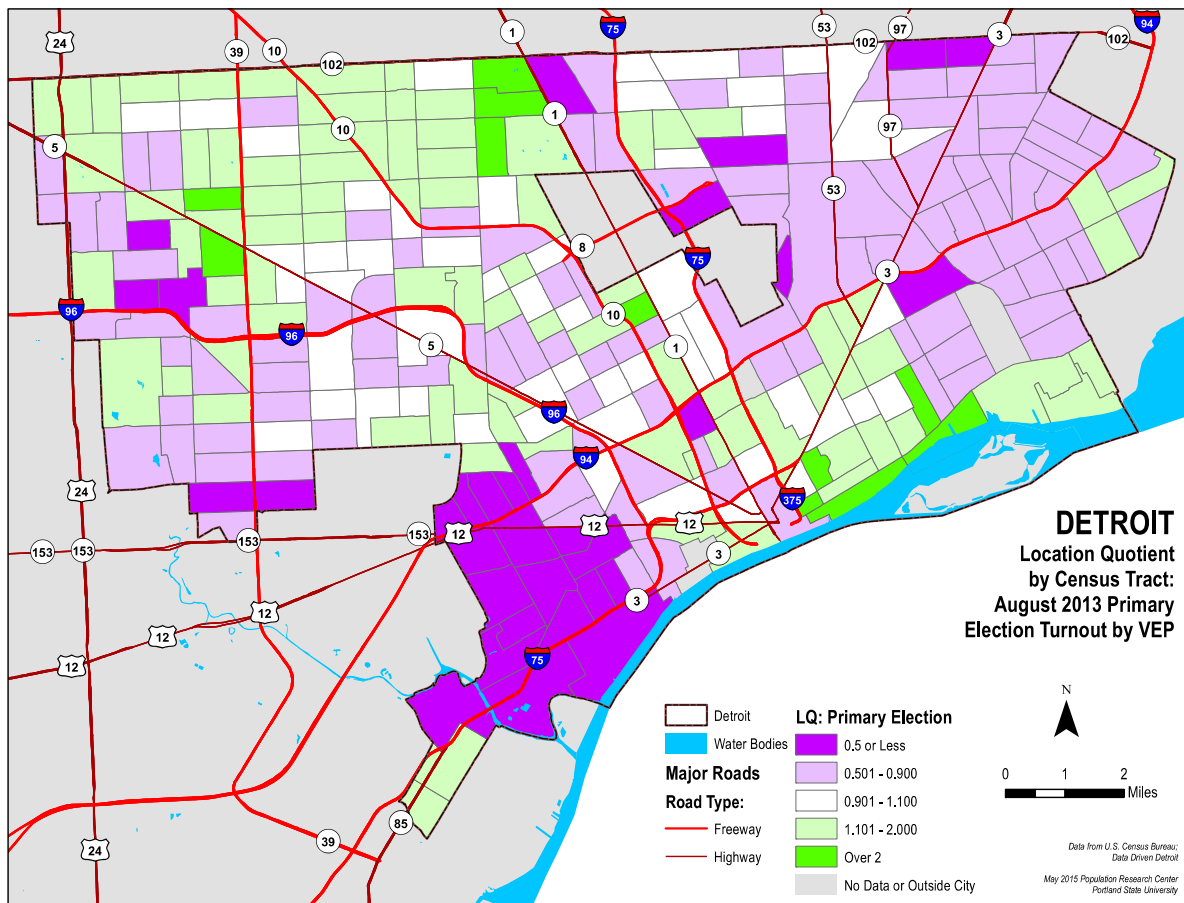


Figure 10. Primary Election Turnout as a Percentage of VEP with Location Quotients. Detroit, MI.

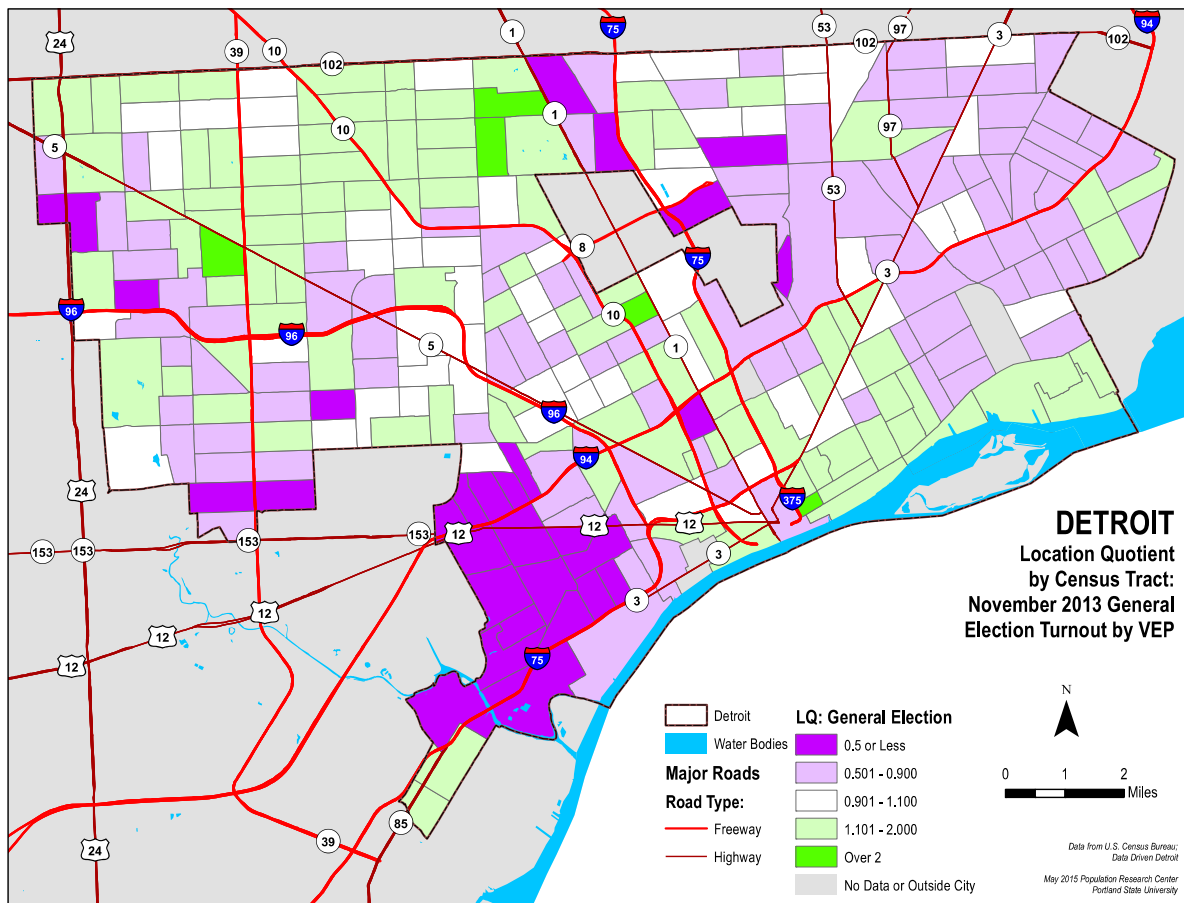


Figure 11. General Election Turnout as a Percentage of VEP with Location Quotients. Detroit, MI.

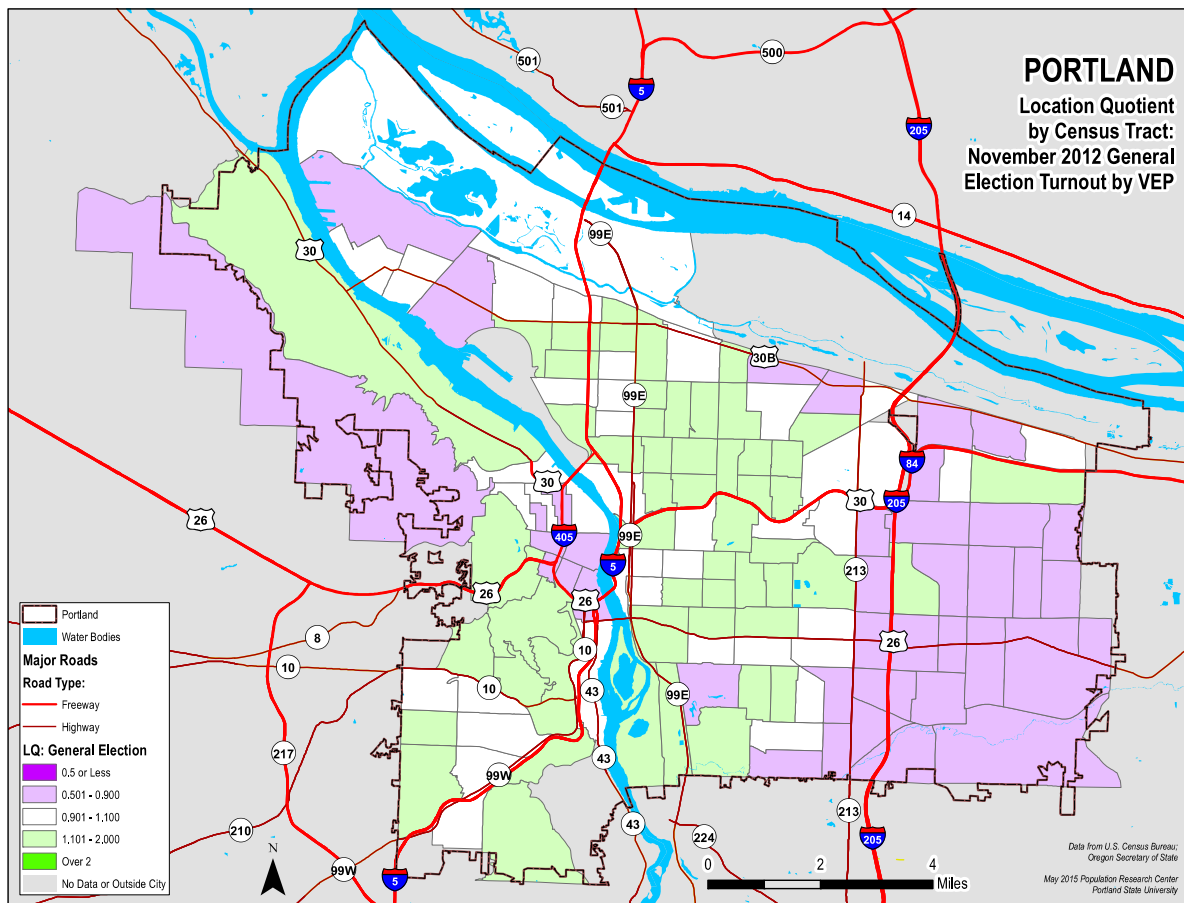


Figure 12. Primary Election Turnout as a Percentage of VEP with Location Quotients. Portland, OR.

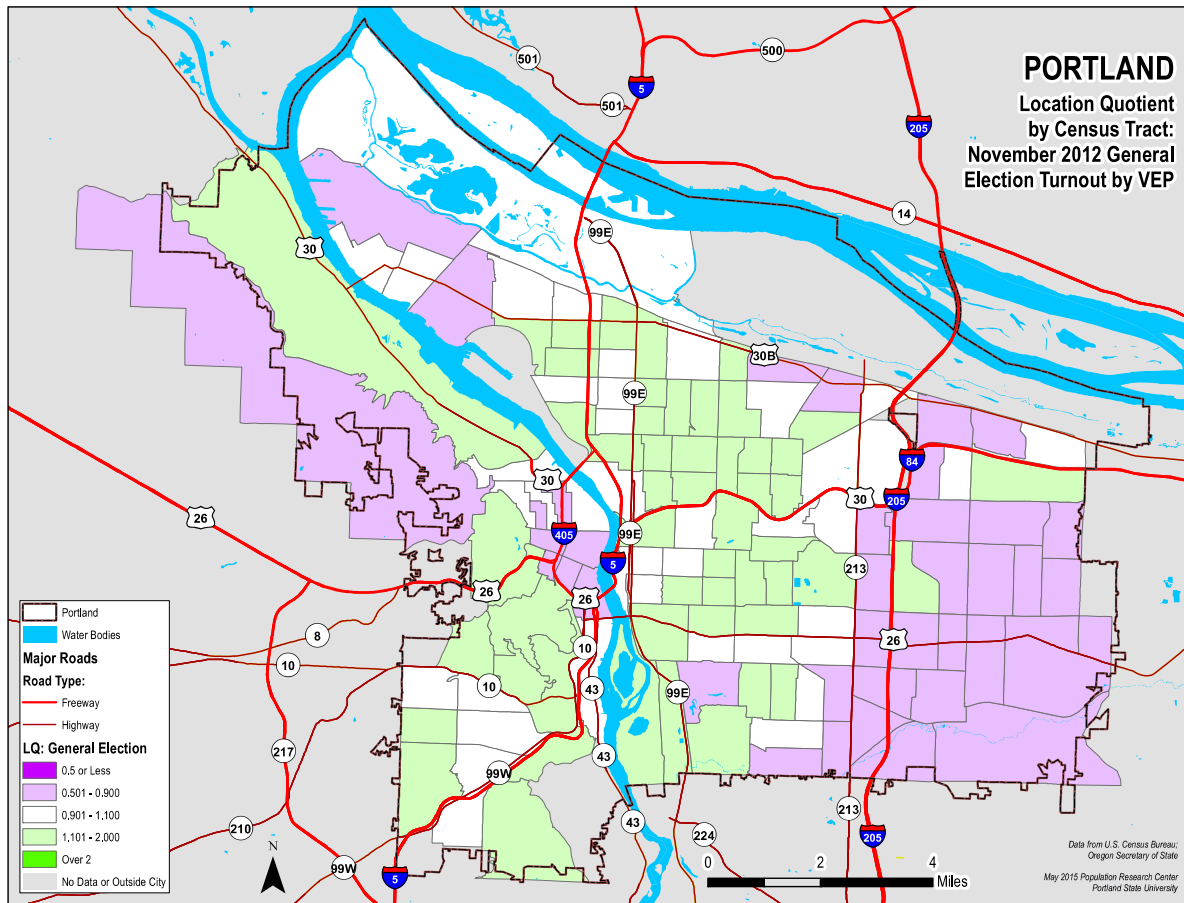


Figure 13. General Election Turnout as a Percentage of VEP with Location Quotients. Portland, OR.

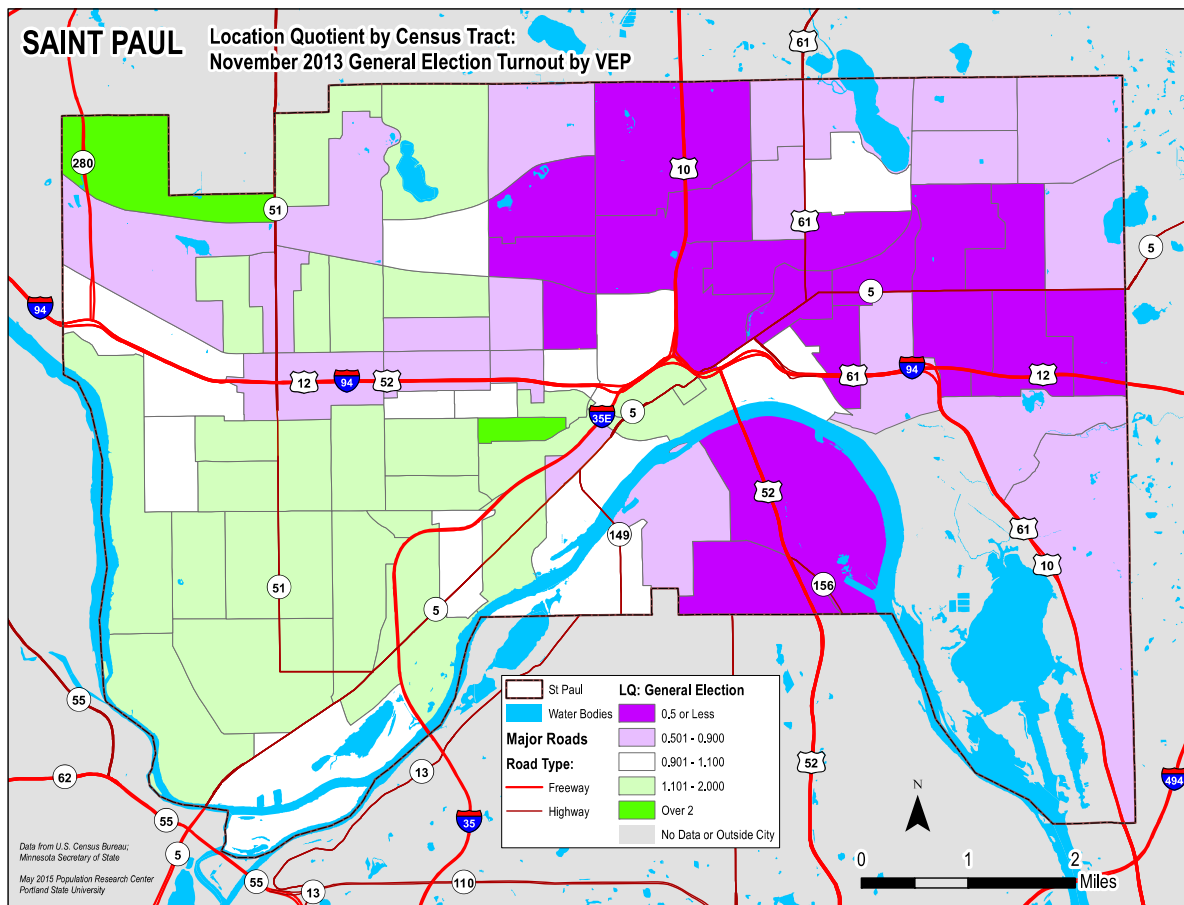


Figure 14. General Election Turnout as a Percentage of VEP with Location Quotients. St. Paul, MN.

Voter Propensity (Median Age)

Voters are typically older than the voting age population as a whole. This is a well-established truism in the world of election research, most of which focuses on major national elections (i.e. midterm and presidential elections held in even-numbered years). What our study reveals is how even more dramatic differences in age are for mayoral elections.

Table 3 compares the median age of those casting ballots in these seven elections to the median age of the Voting Age Population (VAP) in each of these cities⁴². For all but one of seven election contests among the four jurisdictions, the median age of those individuals who cast ballots was nearly a “full generation” older than the median age of the city’s Voting Age Population (VAP) of adults 18 years and older. While the median VAP for the three cities is in the low-to-mid 40s, the median age of voters punching ballots in the Mayoral general election ranges from a low of 49 in Portland to a high of 59 in Detroit. This difference in median age, approximately 10-15 years, increases by 3-9 years in the primary elections as turnout is more skewed towards older voters.

Table 3. Median Age of Voters and Voting Age Population (VAP), 2012 and 2013

	Primary Election	General Election	VAP
Charlotte	59.0	56.0	41.8
Detroit	62.0	59.0	45.7
Portland	58.0	49.0	42.3
St. Paul	-	57.0	40.8

Sources: US Census Bureau ACS 5 year estimates 2009-2013, Mecklenburg County Board of Elections, Michigan, Minnesota, and Oregon Secretary of State Offices. Analysis by PRC. Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city). There was no Mayoral primary in St. Paul.

Voter Propensity (Age with Odds Ratios)

The difference between the median age of voters and VAP provides important insight for understanding how voting propensity varies by age. At the same time though, median age does not contextualize *how likely* it is for older individuals to cast a ballot, and to what extent the likelihood varies across political space.

To express the likelihood that a randomly chosen 65-year-old and older registered voter would cast a ballot relative to the likelihood of their 18-to-34-year-old counterpart doing

⁴² While using a “VEP Lite” denominator here would have been preferable, it proved far too difficult to calculate the median age of citizens through census data. This may be possible in future projects, by delving deeply into PUMS data. However, given that the portion of VAP that is “voting ineligible” is relatively low in each of these communities – ranging from 4% in Detroit to 11% in St. Paul – we believe that a “VEP Lite Median age would be quite similar to the VAP Median age.

so, we calculated a Voter Turnout Odds Ratio⁴³ [OR] (also see Appendix A, which presents a second alternative for examining voter turnout—referred to as the Voter Turnout Percentage Ratio). In effect, it's a measure of “electoral clout,” and the extent to which a given voter punches below, at, or above their normal electoral weight, compared to turnout being 100 percent for everyone. Consider the following example. If there are 60,000 registered voters in each age group (65 years and older, and 18-34 year olds) and 50,000 votes were cast by voters 65 years and older, while only 25,000 18-34 year olds cast ballots, the OR would be calculated as: $(50,000/25,000)/(10,000/35,000)=7.0$, which means that individuals 65 years and older are 7 times more likely to cast a ballot than their 18-to-34-year-old neighbors.

In the above example, the numerator or “voted” category (elderly voters/young voters) produces a result of 2.0 while the denominator or “non-voted” (elderly non-voters/young non-voters) yields a result of 0.29. While the actual number of elderly voters was two times the number of youth voters, the number of non-voters among the registered elderly was only 29 percent $(10,000/35,000)$ of the number of non-voting youth. So any randomly-chosen elderly voter was 7 times more likely to be among those casting ballots, than a randomly-chosen registered voter 18-34 years of age.

As Table 4 shows, the turnout odds ratios in the three primary elections were all in double digits: older voters in Detroit, Portland, and Charlotte are more than 13, 14, and 19 times more likely to turn out compared to their younger neighbors, respectively. For the general election, the turnout odds ratios were lower, but not by much: Charlotte (13.8), Detroit (9.5), Portland (7.9) and St. Paul at 7.7. Even in Portland's very high-turnout general election—where 72.3 percent of registered voters cast ballots—the odds that a randomly-chosen elderly registered voter cast a ballot was 7 times that of an individual 18-34 years old. In the Portland primary election, voters 65 years and older accounted for nearly four times the number of votes cast as voters 18-34—even though the younger cohort had almost twice as many registered voters.

⁴³ The Odds Ratio is calculated as follows: $OR=(A/B)/(C/D)$ for a 2x2 matrix. In this report, the numerator (A/B) refers to the number of ballots cast for each age group (A=voters 65 years and older; B=voters 18-34) while the denominator refers to the number of voters in each age group (C= voters 65 years and older; D=voters 18-34) NOT casting ballots.

Table 4. Voter Propensity Odds Ratios, 65 and older to 18-34 years old by City, 2012 and 2013

	Primary Election			General Election		
	Tract Median	Tract Average	Citywide Average	Tract Median	Tract Average	Citywide Average
Charlotte	16.8	22.2	19.0	12.2	13.4	13.8
Detroit	13.1	13.9	12.9	9.3	9.5	9.5
Portland	14.6	15.4	14.3	8.4	8.8	7.9
St. Paul	-	-	-	7.6	8.3	7.7

Sources: U.S. Census Bureau ACS 5 year estimates 2009-2013, Mecklenburg County Board of Elections, Michigan, Minnesota, and Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city). There was no Mayoral primary election in St. Paul.

This huge differential in electoral clout also shows in comparisons with Generation X individuals (registered voters 35-49 years of age). Conventional political wisdom is that once most citizens “settle down”—that is, buy a house, get married, and start a family—their propensity to cast a ballot rises significantly. Yet, for mayoral elections, we found surprisingly weak evidence supporting this maxim. In Charlotte, elderly voters still cast twice the number of ballots in the primary and about 1.2 times the number in the general compared to registered voters in the 35-49 category (whose numbers were nearly twice as large). In Detroit, voters 65 years and older cast three times the number of ballots in the primary and twice as many in the general than individuals 35-49 (despite a registered voter cohort that was 1.4 times larger). In St. Paul, voters 65 years and older cast almost two times as many votes in the general compared to the 35-49 year old registered voter cohort being almost twice as large.

Contextualizing how these turnout odds vary across political space is also critically important. As illustrated in Figures 15-21, we found large differentials in turnout odds ratios when considering odds in census tracts. In many tracts, odds ratios of 20-50 to 1 are evident, and several Charlotte primary election tracts exceeded 100 to 1.

Figure 20 illustrates that the voter odds ratios for the Portland mayoral general election range from a low of 3.5 (inner NE Portland near the junction of Interstates 5 and 84) to a high of 20.7 (SW Portland south of U.S. Highway 26). This means that depending on the census tract, a randomly chosen registered voter 65 years and older was 3.5 to 20.7 times more likely to be among those casting a ballot than a randomly chosen voter 18-34 years of age.

For Portland’s mayoral primary (Figure 19), the odds ranged from a low of 6.0 (SE Portland south of U.S. Highway 26) to a high of 42.2 (SW Portland near Interstate 405)⁴⁴ due to a smaller and more unrepresentative group of voters at the polls. Meanwhile, for the primary and second-round mayoral elections in Charlotte, Detroit, and St. Paul (general only), the

⁴⁴ This ratio is likely skewed because of the high percentage of students enrolled at Portland State University (PSU) living in this census tract. The next highest odds ratio is 32.0 for the census tract north of U.S. Highway 26 in East Portland.

voter turnout odds ratios in St. Paul (Figure 21) and Detroit to a lesser extent (Figures 17 and 18) largely resemble ratios in Portland's two elections, the voter turnout odds ratio in Charlotte's primary are strikingly different. Figure 15 shows that in Charlotte's primary election, the odds ratios in a number of high turnout census tracts in South Charlotte were over 50, with several census tracts showing ratios of 106-116.

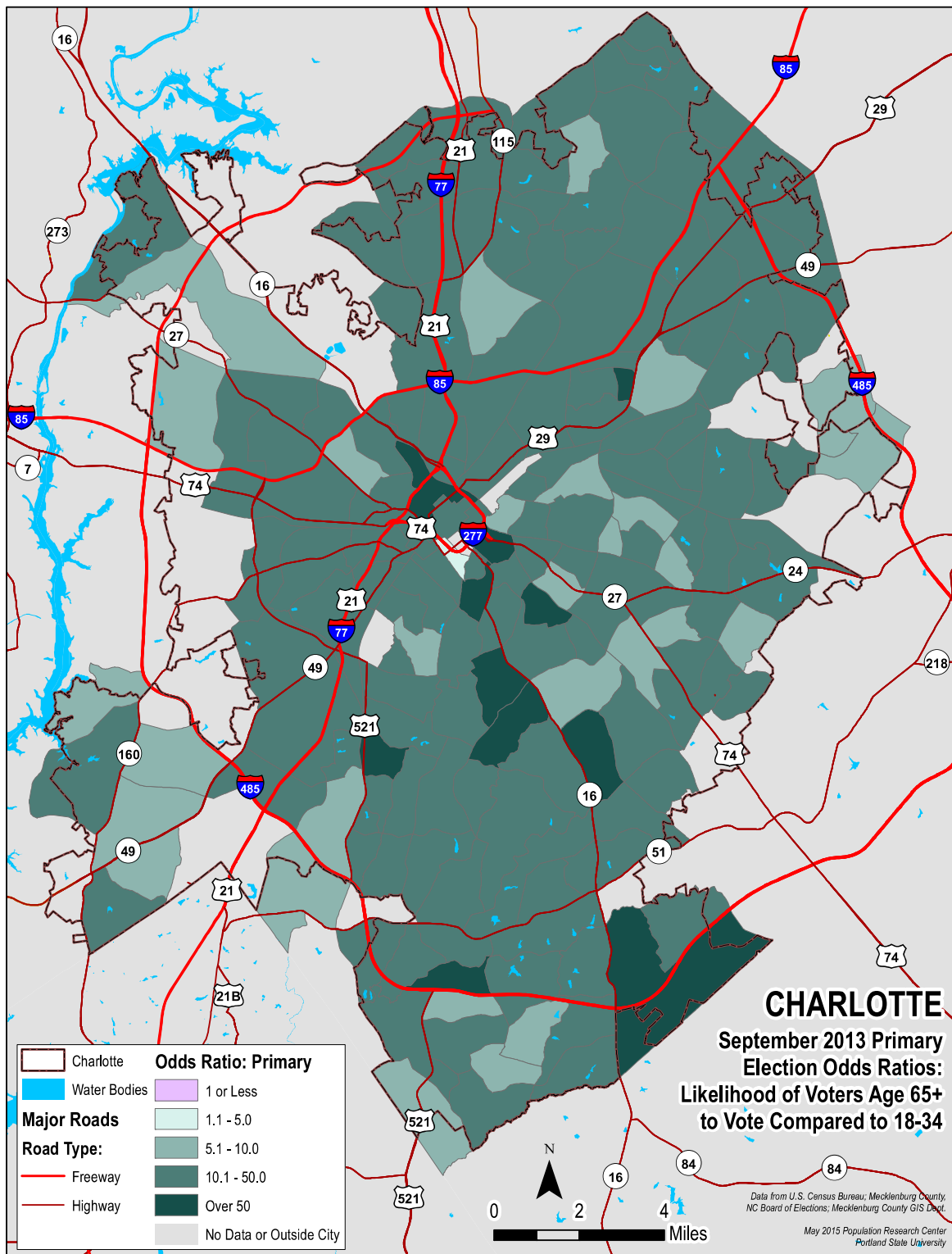


Figure 15. Primary Election Odds Ratios. Charlotte, NC.

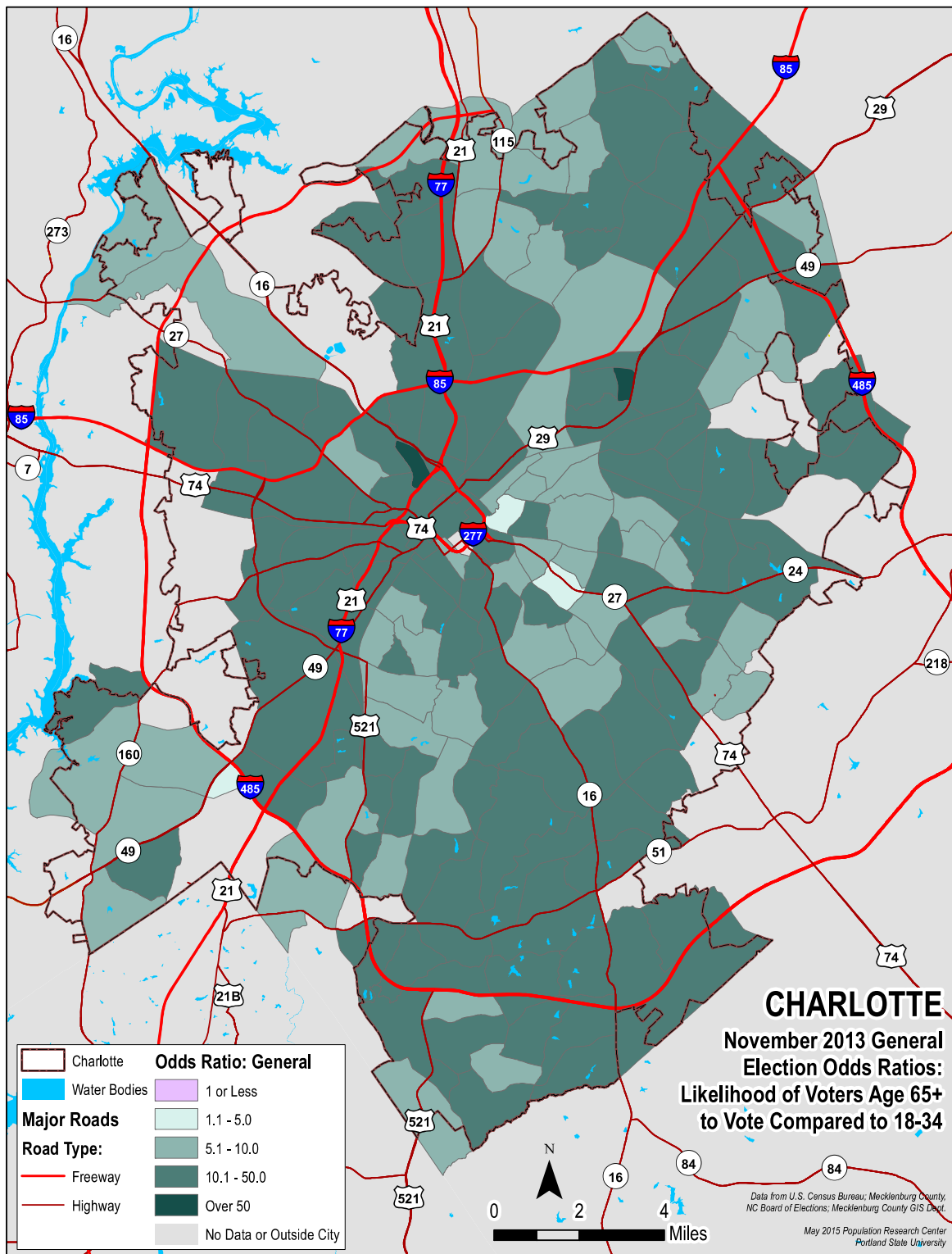


Figure 16. General Election Odds Ratios. Charlotte, NC.

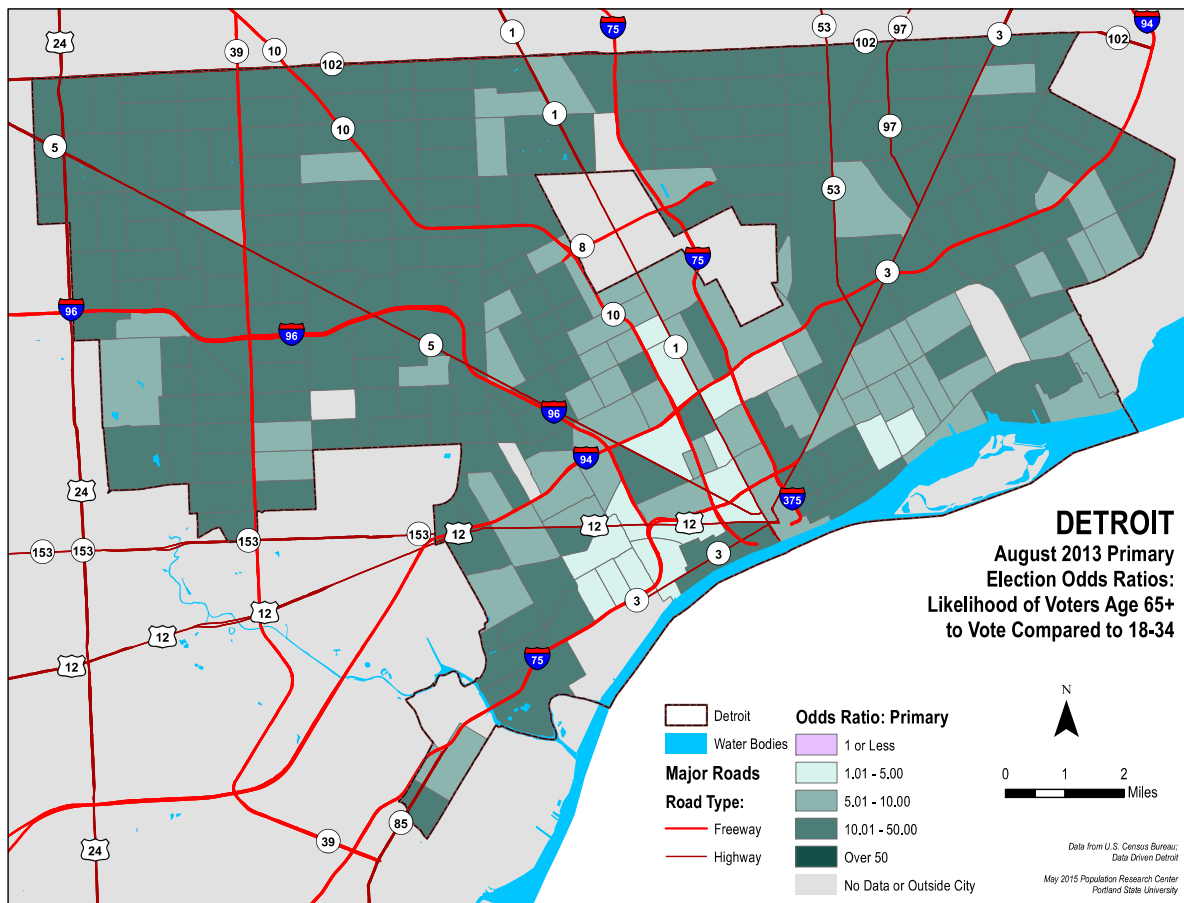


Figure 17. Primary Election Odds Ratios. Detroit, MI.

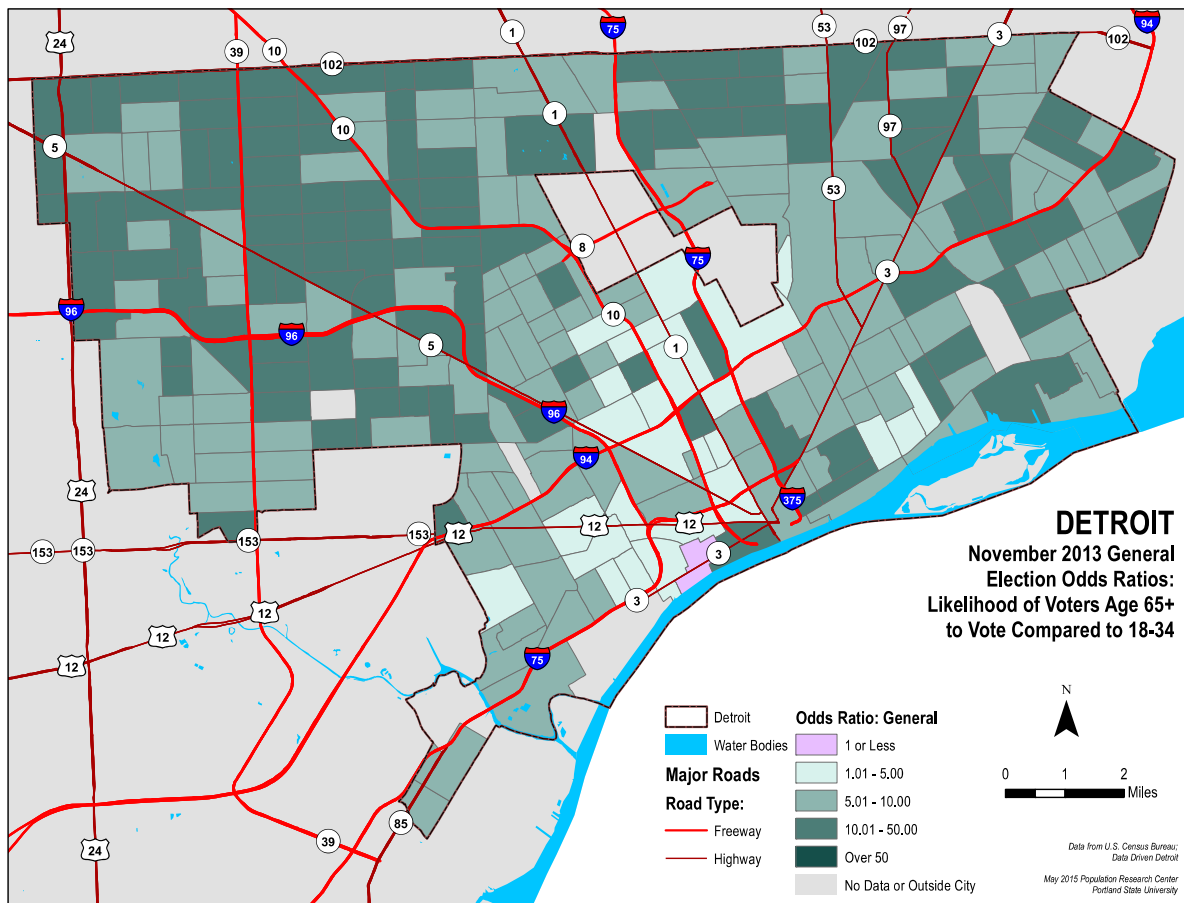


Figure 18. General Election Odds Ratios. Detroit, MI.

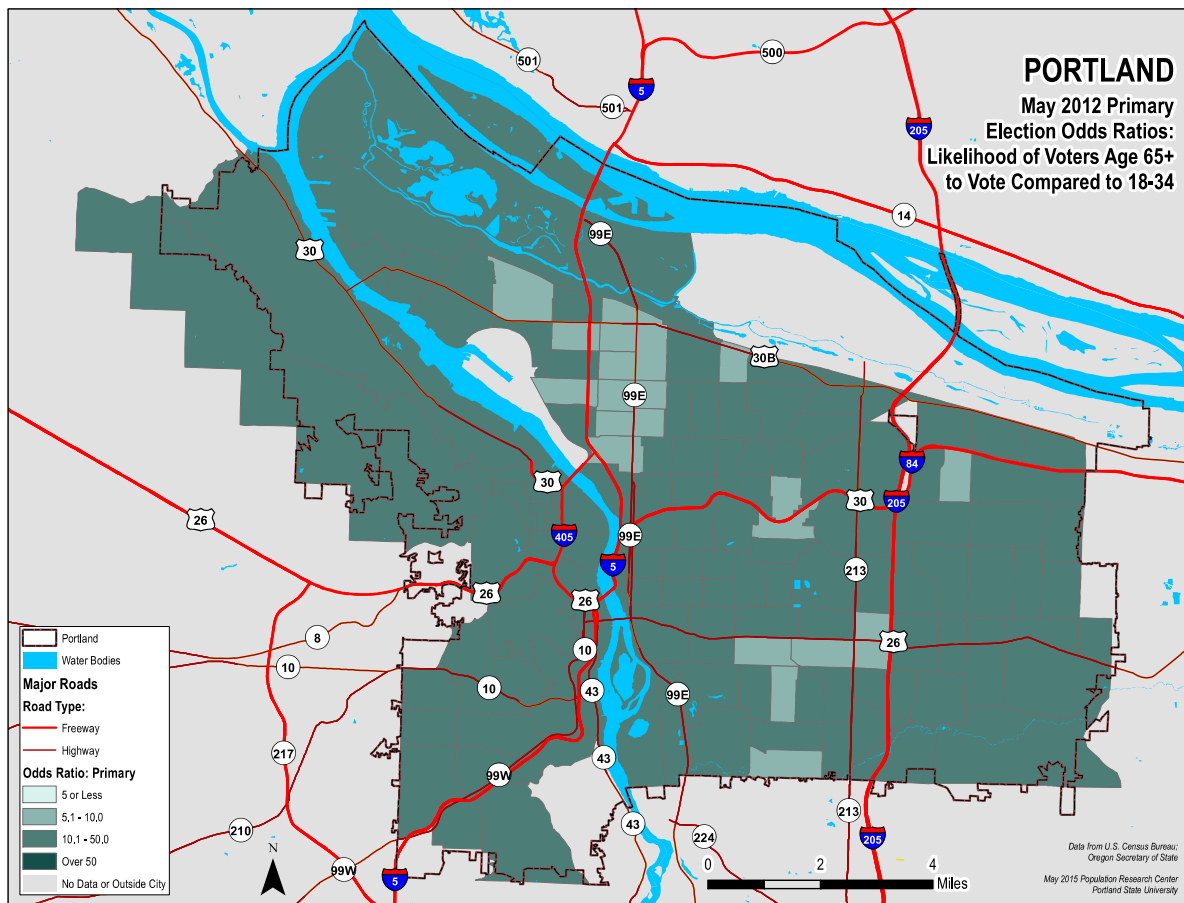


Figure 19. Primary Election Odds Ratios. Portland, OR.

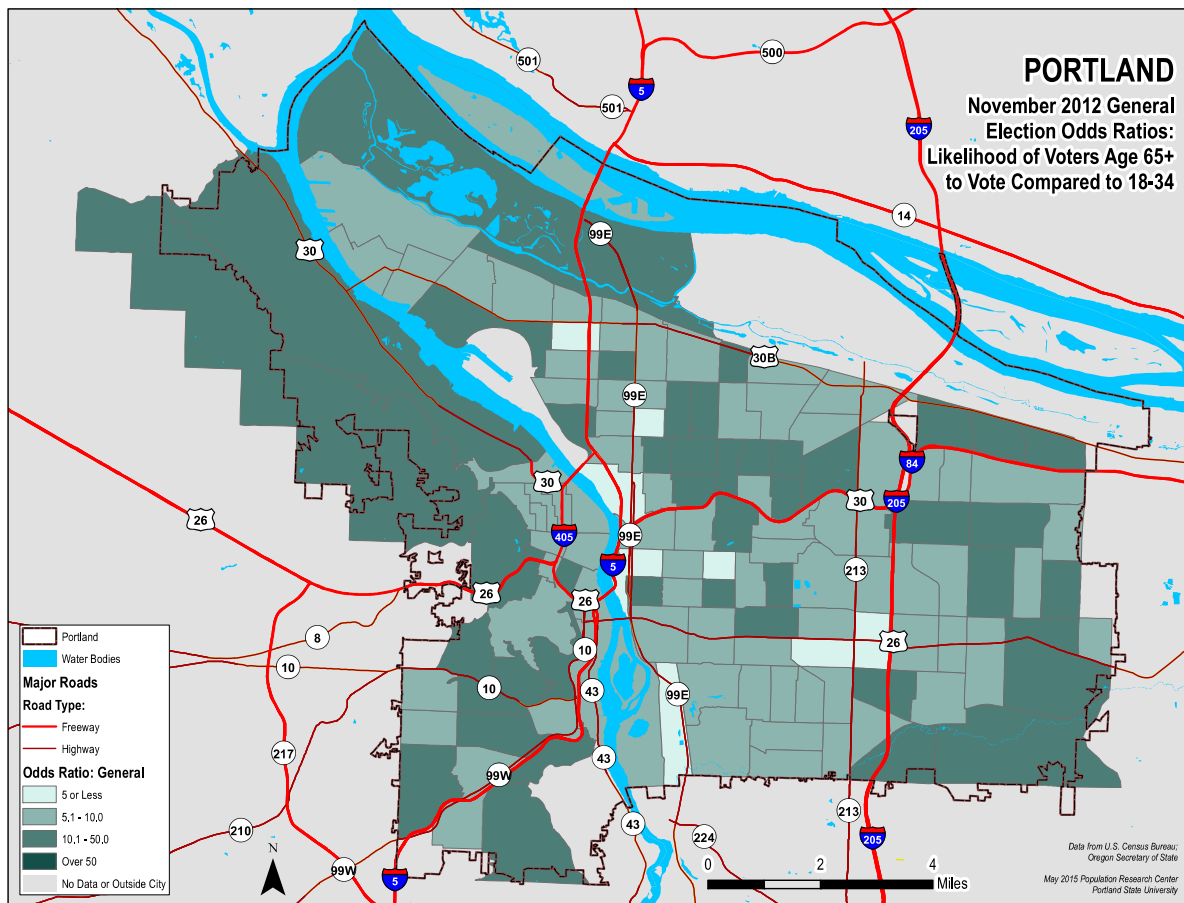


Figure 20. General Election Odds Ratios. Portland, OR.

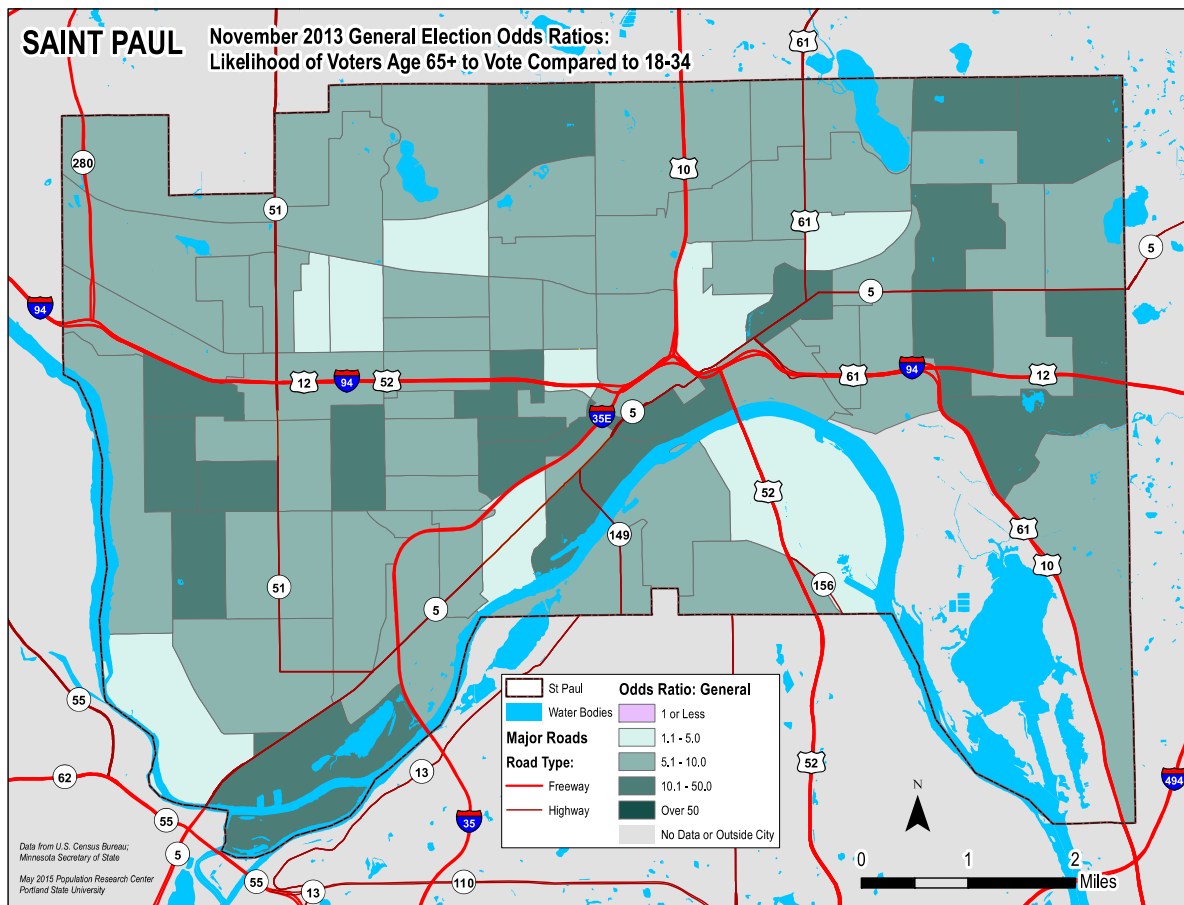


Figure 21. General Election Odds Ratios. St. Paul, MN.

Voter Propensity (Age with Odds Ratios by Registration Status)

If anything, the turnout odds ratios significantly *understate* the true differences between elderly and younger citizens when it comes to voting behavior because the calculations above are based on the number of registered voters within each age group. Given the selectivity of voter registration, particularly among the youngest, 18-to-34-year-old cohort, we argue it is necessary to consider the number of unregistered voters in each age category.

Table 5 shows the number and percentage of the unregistered VAP for various age cohorts across each city. Even after accounting for a general tendency to *overestimate* the number of registered voters⁴⁵, the number of unregistered among the 18-34 year old cohort in each community is remarkable.

⁴⁵ As noted earlier, the accuracy and timeliness of voter registration records varies widely, so it is tricky to rely too much on registration statistics. Indeed, some results are downright illogical. For example, in all 4 of the cities, the number of reported registered voters in the 65 years and older cohort actually exceeds the ACS estimate of the entire 65 years and older "Voting Age Population" (VAP).

Table 5. VAP, Registered Voters (RV), and Unregistered Residents from VAP, 2012 and 2013

City	Age	VAP*	Registered Voters	Unregistered residents from VAP*	Registered Voters as Percent VAP (ACS 09-13)
Charlotte	18-34	197,910	152,483	45,427	77.1%
	35-49	162,547	137,651	24,896	84.7%
	50-64	117,443	112,649	4,794	95.9%
	65+	64,119	68,031	-3,912	106.1%
	Total	542,019	470,814	71,205	86.9%
Detroit	18-34	169,626	143,603	26,023	84.7%
	35-49	135,320	136,637	-1,317	101.0%
	50-64	133,769	133,966	-197	100.2%
	65+	83,573	99,460	-15,887	119.0%
	Total	522,288	513,668	8,620	98.4%
Portland	18-34	166,886	103,264	63,622	61.9%
	35-49	132,408	106,743	25,665	80.6%
	50-64	107,416	83,504	23,912	77.7%
	65+	62,491	64,504	-2,013	103.2%
	Total	469,201	358,018	111,183	76.3%
St. Paul	18-34	88,734	49,696	39,038	56.0%
	35-49	53,365	38,358	15,007	71.9%
	50-64	47,940	38,505	9,435	80.3%
	65+	25,599	26,161	-562	102.2%
	Total	215,638	152,766	62,872	70.8%

*Data from the 2009-2013 CVAP file.

Sources: U.S. Census Bureau ACS 5 year estimates 2009-2013. Analysis by PRC.

Detroit shows the fewest number of unregistered voters among 18-34 year olds at 27,023 (169,626 ACS count minus 143,603), but Detroit has been rapidly losing population in recent years, especially among the young, which suggests that the VAP number might be artificially low. Detroit (and Michigan, generally) are known to do a relatively poor job of keeping their voter registration rolls up to date, including retaining names on their rolls long after they've moved to other jurisdictions. In other words, there's also good reason to believe that the registered voter number is too high, and that a significantly lower portion of Detroit's "VEP-Lite" is registered within Detroit than these numbers suggest.

Portland and St. Paul have the most updated registration systems, and there the numbers are quite dramatic. In Portland, just 62 percent of the 18-34 VAP shows as currently registered, meaning that almost 63,000 are not (even if one assumes that 20 percent of the 18-34 year old VAP consists of ineligible, non-citizens, that still means over 50,000). St.

Paul shows an even higher non-registration rate, with almost half the 18-34 VAP (43.4 percent) not registered.

Voter Turnout by Race/Ethnicity

The ability to analyze voter turnout based on voters' self-identified racial/ethnic group affiliation was an unexpected result of our research project, made possible only by the fact that North Carolina happens to be one of 6 states still required by the U.S. Justice Department's administration of the Voting Rights Act to require that voter registration cards allow voters to self-identify their preferred race/ethnicity. Accordingly, in addition to analyzing the voter turnout behavior of Charlotte voters by age and location, it was also possible to examine turnout patterns by race/ethnicity.⁴⁶ As with the age cohort data, the analysis is based on using the Voting Age Population (VAP) as the denominator.

The most striking fact emerges from Charlotte's primary, where self-identified black residents were actually 1.6 times *more likely* to vote than white residents. In the general election, Black/African American residents were almost equally as likely to vote as in the general election, where the turnout rates (of registered voters) were 19 and 21 percent, respectively. While a turnout rate of roughly 1 in 5 registered voters is hardly impressive, compared to other major self-identified racial/ethnic groups, the rate was stunningly highly. Among Charlotte's 23,000 self-identified Asian registered voters for example, the turnout was just 8% in the general election, while among the 15,000 self-identified Hispanic/Latino registered voters, turnout was just 5%. And when considering Charlotte VAP, the statistics are even more skewed. Black/African American residents, for example, accounted for about 172,000 of the city's adult residents (35%) and cast over 16,400 ballots in the primary. On the other hand, Hispanic/Latino residents, who number nearly 60,000, cast just 176 votes.⁴⁷

Voter Turnout by SES

The vast majority of existing research involves much higher-profile national elections involving candidates for state and federal office (e.g, Governor, U.S. Congress, and President). This study provides an opportunity to examine how key sociodemographic characteristics that researchers have long known correlate with voting behavior—household income, educational attainment, and homeownership/rental status—vary with respect to voting dynamics in mayoral elections (especially those that are held “off cycle” and where the mayor's race represents the “top of the ticket”).

Several key caveats are important at the outset. First, by law, neither voter registration nor census records are associated with specific socioeconomic (SES) indicators with individual voters. Second, it's a common “associational fallacy” to conclude that if just 2 percent of the

⁴⁶ Of course, there is a certain degree of uncertainty here, specifically with respect to: 1) the number of racial/ethnic combinations (25), and; 2) the number of individuals choosing “other” and those opting not to identify.

⁴⁷ Another factor worth noting is that the May 2012 Democratic primary was dominated by several black candidates for mayor that together targeted mobilizing Charlotte's African American community.

residents in a predominately low-income tract cast ballots versus 20 percent in a relatively affluent tract, that higher income residents vote at a rate 10 times that of their poorer counterparts, when in fact, the 2 percent in the predominately low-income tract might also happen to be wealthy, and the 20 percent in the predominately high income tract might turn out to be mostly poor.

Based on this framework, the research team first looked at all four cities to determine what broad relationships might exist between voting behavior by age and SES. We also did a “deeper dive” into Charlotte and Portland to determine the characteristics of the highest and lowest turnout tracts within those communities, and the extent to which these are associated with each of the SES factors.

Our results show that age appears to be far and away more strongly associated with voter turnout behavior compared to household income, educational attainment, or housing/rental status. Even in far more affluent and elite neighborhoods, 18-34-year-old voters cast ballots at significantly lower rates than voters aged 65 and over, and even 35-64-year-olds living in census tracts at lower income levels.

Table 6 illustrates these findings. Here, voter turnout rates are reported for the three broad age cohorts, and for tracts at 50 percent and 150 percent of the city’s median household income.

Table 6. Voter Turnout as a Percentage of Registered Voters (RV) by Household Income

Voter Turnout as a % of Registered Voters (RV) in Low (50% of Median) vs. High (150% of Median) Household income

	Charlotte Primary (6.9% Overall RV Turnout)-			Detroit Primary (17.1% Overall RV Turnout)			Portland Primary (34.2% Overall RV Turnout)			St. Paul Primary (N/A; No Election)		
	65+	35-64	18-34	65+	35-64	18-34	65+	35-64	18-34	65+	35-64	18-34
Census Tract Less than 50% of Median Household Income	18%	7%	2%	30%	14%	4%	52%	26%	8%	n/a	n/a	n/a
Census Tract Greater than 150% of Median Household Income	16%	7%	2%	42%	19%	6%	70%	42%	15%	n/a	n/a	n/a

	Charlotte General (19.2% Overall RV Turnout) -			Detroit General (24.2% Overall RV Turnout)			Portland General (72.3% Overall RV Turnout)			St. Paul General (19.9% Overall RV Turnout)		
	65+	35-64	18-34	65+	35-64	18-34	65+	35-64	18-34	65+	35-64	18-34
Census Tract Less than 50% of Median Household Income	32%	15%	4%	35%	20%	8%	80%	66%	40%	30%	17%	6%
Census Tract Greater than 150% of Median Household Income	40%	23%	7%	50%	28%	10%	91%	84%	52%	48%	30%	10%

Sources: U.S. Census Bureau ACS 5 year estimates 2009-2013, Mecklenburg County Board of Elections, Michigan, Minnesota, and Oregon Secretary of State Offices. Analysis by PRC.

In Charlotte's general election, turnout among residents 65 years and older (32 percent) and 35-64 (15 percent) is roughly 2-4 times higher than turnout among 18-34 year olds (7%) living in census tracts at 150 percent of the median household income. Similarly, in Detroit, turnout among residents 65 years and older (35 percent) and 35-64 (20 percent) is roughly 2-3 times the turnout rate of 18-34-year-olds (10 percent) residing in more affluent tracts. For Portland and St. Paul, the effect was present, but at slightly less pronounced. Perhaps more stunning are the rates in the lower-turnout primary elections. For example, in the Charlotte primary, 18 percent and 7 percent of residents 65 years and

older and 35-64, respectively, living in low income tracts voted—this rate is 3.5 to 7 times higher compared to 18-34 year olds (4 percent) residing in more affluent areas.

One interesting aspect of the Charlotte primary election is that in Charlotte’s primary election, higher turnout was slightly negatively correlated with household income (Figure 22); that is, turnout rates for each age group were flat or even somewhat higher (especially for 65+ voters) at the *lower*, 50-percent level than at the 150-percent level. One potential explanation is that, given the significantly higher turnout of Black/African American voters noted earlier in this particular election, their greater electoral interest outweighed the fact that Black/African American Charlotteans are more likely to live in census tracts with lower household income.

The Portland data (Figure 23) also suggest some interesting effects of that community’s different voting system. Voter turnout rates of residents (of all ages) who live in lower household income census tracts voted at rates double or even quadruple the rates in other cities’ contests where the overall turnout is fairly comparable (i.e. the other 3 cities’ general elections). In Oregon, all registered voters automatically receive their ballots through the mail two weeks prior to the election; there are no regular polling stations. Voters can then mail back their ballots, or take them to a government drop station. While this system seems to have little noticeable effect in changing the “old versus young” turnout differential, the data suggest that a larger portion of residents 65 years and older and 35-64-year-old voters in lower-income census tracts end up casting ballots compared to other jurisdictions. This is a particularly salient finding.

Voter Turnout Extremes

Election turnout varies from place to place within a city, and the characteristics of these places also differ. Tables 7-10 show characteristics of the census tracts with the lowest and highest turnout levels in the primary and second-round elections in Charlotte and Portland.

Both cities exhibit similar overall patterns, though both have outliers. Generally speaking, tracts with the lowest voter turnout have lower median household income, lower educational attainment, and higher minority populations than those with the highest turnout. For instance, none of the tracts in the lowest turnout category have a median household income above \$100,000, though one low turnout outlier in Charlotte’s primary election had an income near \$94,000.

Disparities in turnout are substantially more pronounced in general elections. In Charlotte’s general election for example, none of the highest-turnout tracts have minority population shares over 10 percent, while four of the lowest-turnout tracts have shares above 60 percent (one is over 96 percent). This is remarkably different from the primary election, in which three of the highest-turnout tracts actually have minority shares over 90 percent.

Significant differences in voter propensity also emerge when considering tract-level household income. While Charlotte's turnout extremes vary widely in income for its primary election, when it comes to the general four of the five highest-turnout tracts have six-digit median incomes, with the fifth coming close at almost \$85,000. The highest median income in the lowest-turnout tracts is under \$32,000, and one of them is below \$20,000. Educational attainment shows the same phenomenon; all of the highest-turnout tracts in Charlotte have over 60 percent of their populations holding at least a Bachelor's degree. All of the lowest-turnout tracts have levels below 25 percent.

Portland's elections show similar, albeit much less pronounced, trends. Three of its highest-turnout tracts in the general election also have median incomes over \$100,000. Two of those same tracts exhibit some of the highest turnout in the primary. Conversely, three of the lowest general turnout tracts have median incomes below \$25,000 in the general, with two of those same tracts also showing up among those with the lowest primary turnout.

The trends may be less apparent during primary elections due to the lower overall levels of voter turnout. In Charlotte's primary, the tract with the highest turnout only reached a level of 17.3 percent. The smaller voter pools in the primary open the door to more skewing of voter characteristic data with more selective voting behavior.

Of note are the two cities' differing turnout levels. In their respective primaries, Charlotte's *highest*-turnout tract is 17.3 percent, barely above Portland's *lowest* at 17.2 percent. This happens again in their respective general elections; during those Charlotte's highest turnout tract is at 43.5 percent, but Portland's *lowest* is actually higher at 43.9 percent. While this is partially attributable to Charlotte's mayoral elections being held during an off-year (2013) compared to Portland's (2012, coinciding with the Presidential election), it may also be partially due to Portland's vote-by-mail ballot system.

There's little doubt that a big (if not the biggest) reason for Portland's significantly higher turnout in its mayoral election is that it coincided with the November 2012 presidential election, while Charlotte held its general election off-cycle, in November 2013. However, even Portland's relatively low-interest May 2012 primary election—the Presidential contest was essentially over at that point—the difference between the top 5 and the top low averaged about 3:1. Contrast this with Charlotte, where the differential averaged closer to 10:1. This significantly smaller difference may also be partially due to Portland's all-mail ballot system, which allows voters to exercise their right without traveling to polling sites or arranging to receive absentee ballots.

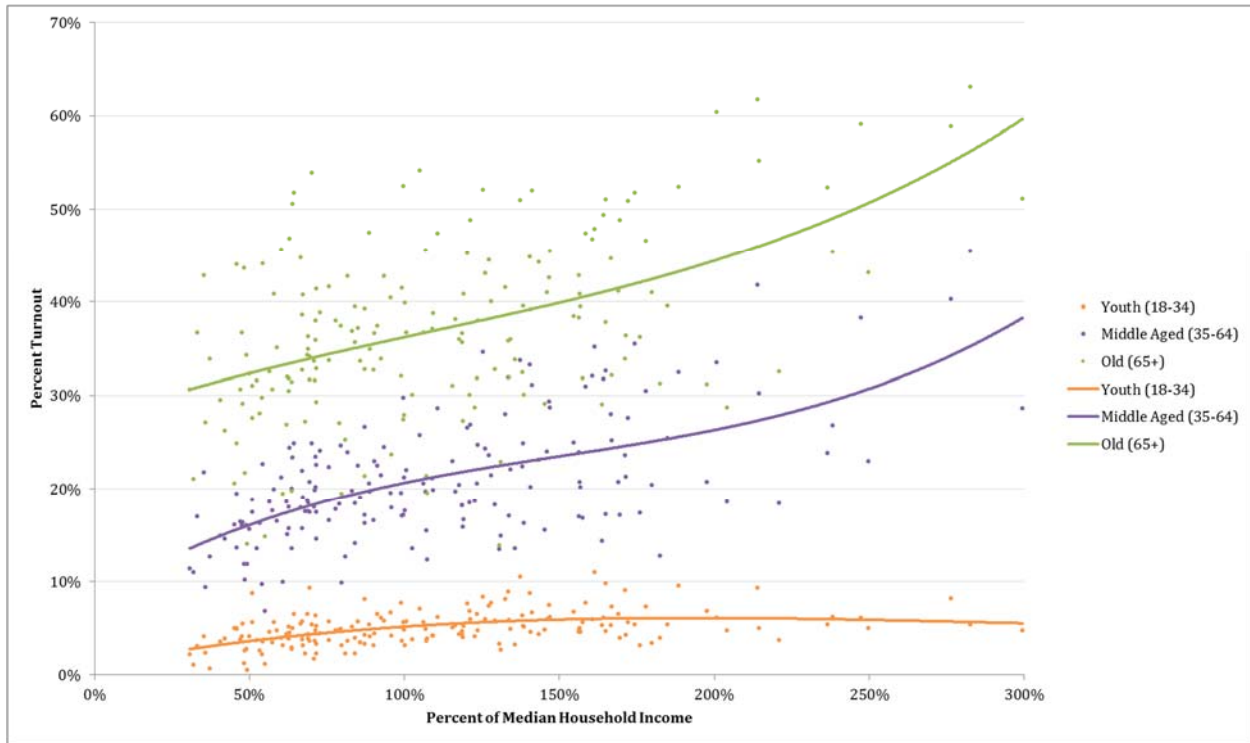


Figure 22. Turnout and Median Household Income (MHI), Charlotte 2013 General Election

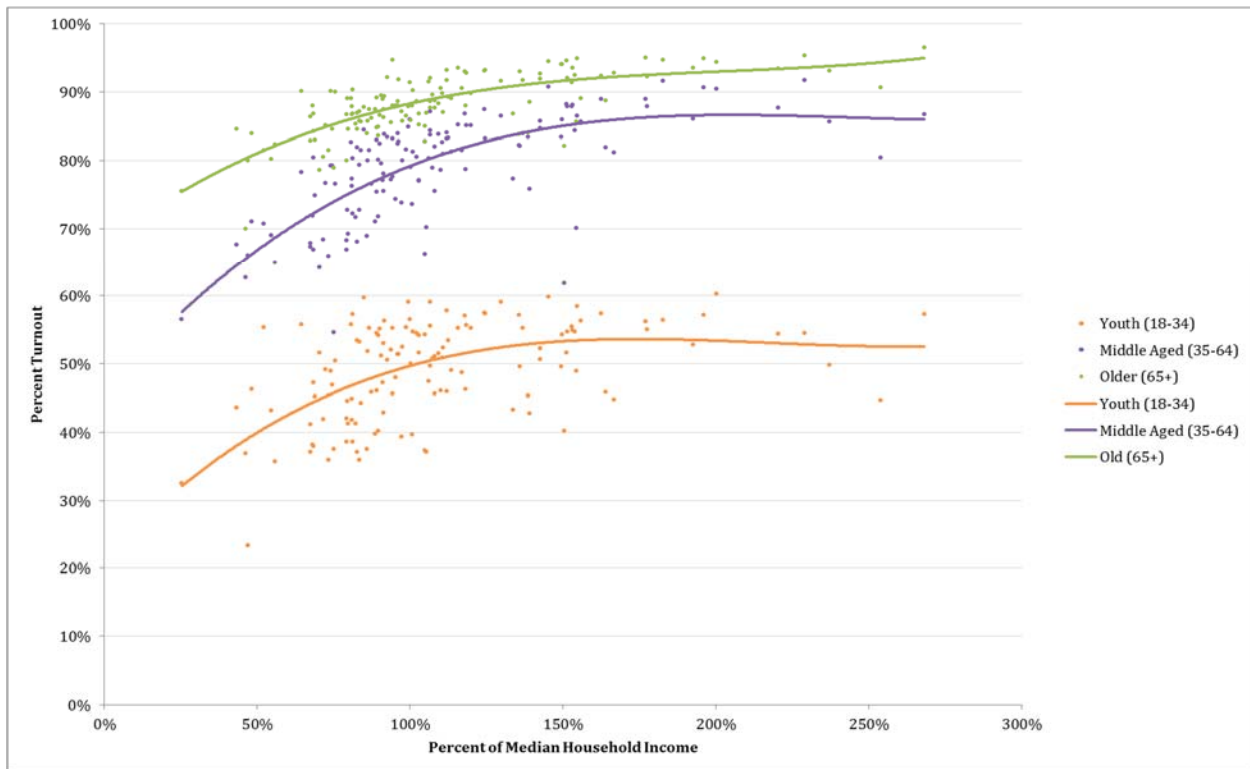


Figure 23. Turnout and Median Household Income (MHI), Portland 2012 General Election

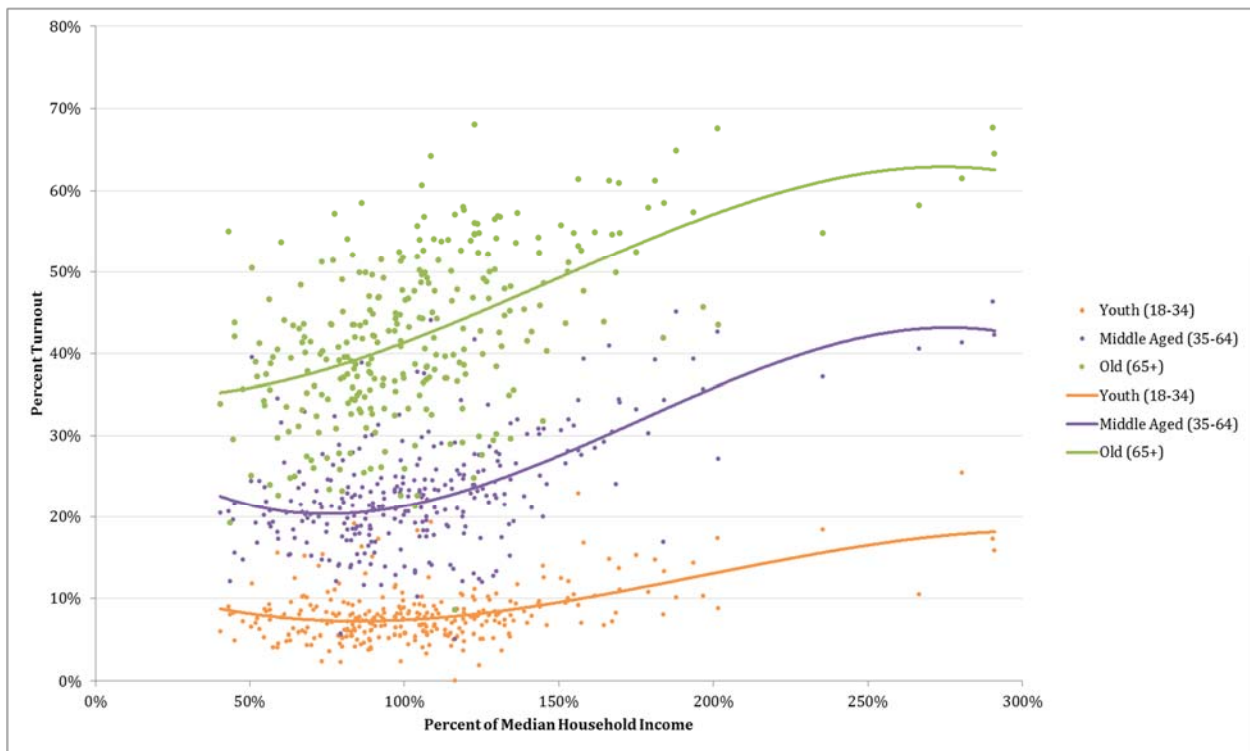


Figure 24. Turnout and Median Household Income (MHI), Detroit 2013 General Election

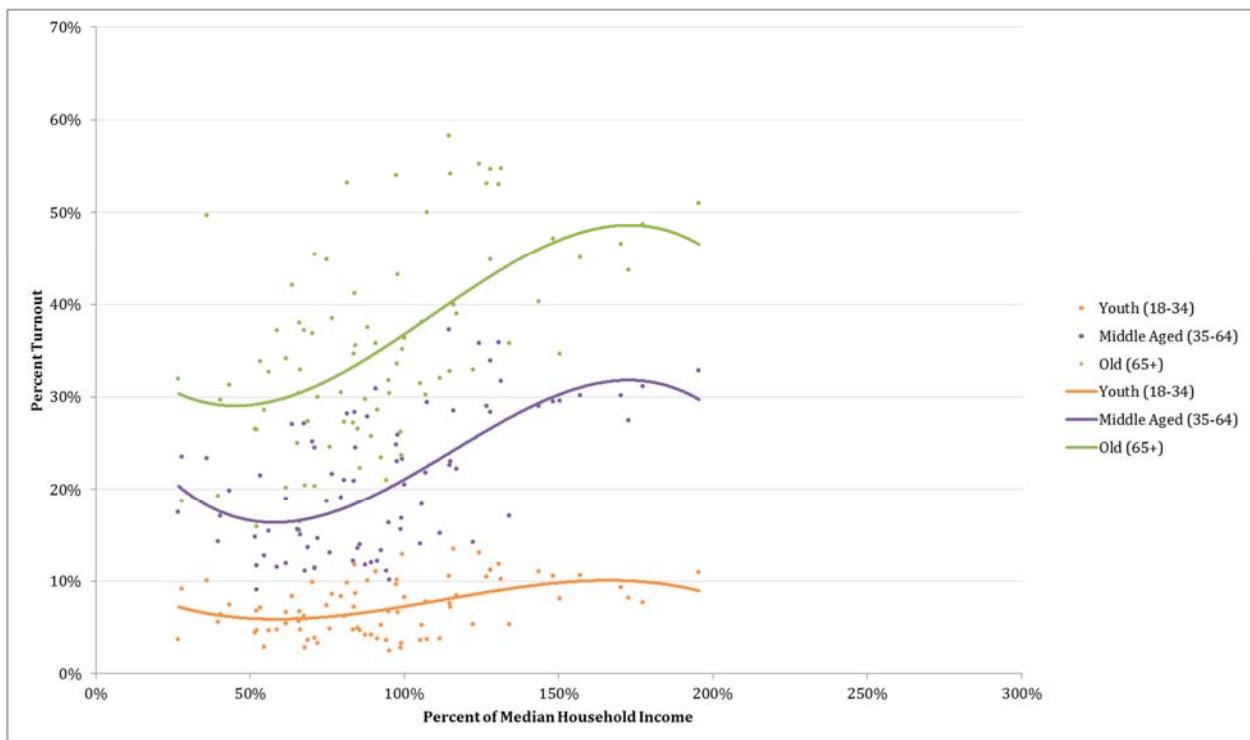


Figure 25. Turnout and Median Household Income (MHI), St. Paul 2013 General Election

Table 7. Census Tracts with Lowest and Highest Voter Turnout (RV), Portland 2012 General Election

Election (Portland)	Turnout Level	Census Tract ID	Voter Turnout (2012 General)	% Minority (Not Non-Hispanic White alone)	% Bachelor's Degree and above	Median Household Income (2013 Dollars)
General	Low	41051005600	43.9%	27.1%	35.7%	\$ 24,702.00
General	Low	41051005100	54.2%	23.1%	58.1%	\$ 39,496.00
General	Low	41051008301	54.7%	56.9%	14.5%	\$ 24,419.00
General	Low	41051005000	56.2%	15.0%	70.1%	\$ 79,265.00
General	Low	41051010600	57.2%	27.0%	25.8%	\$ 13,357.00
General	High	41051001500	84.2%	11.1%	61.8%	\$ 76,518.00
General	High	41051002401	85.1%	20.0%	66.9%	\$ 105,461.00
General	High	41051002501	85.8%	11.6%	67.4%	\$ 120,625.00
General	High	41051002701	86.1%	11.4%	58.4%	\$ 103,235.00
General	High	41051002600	86.3%	9.9%	65.5%	\$ 96,250.00

Sources: US Census Bureau ACS 5 year estimates 2009-2013, US Census Bureau 2010 SF1 tables, Mecklenburg County Board of Elections, Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city).

Table 8. Census Tracts with Lowest and Highest Turnout, Portland 2012 Primary Election

Election (Portland)	Turnout Level	Tract ID	Voter Turnout (2012 Primary)	% Minority (Not Non-Hispanic White alone)	% Bachelor's Degree and above	Median Household Income (2013 Dollars)
Primary	Low	41051008301	17.2%	56.9%	14.5%	\$ 24,419.00
Primary	Low	41051005600	19.8%	27.1%	35.7%	\$ 24,702.00
Primary	Low	41051005000	20.8%	15.0%	70.1%	\$ 79,265.00
Primary	Low	41051000602	21.9%	42.7%	11.8%	\$ 41,711.00
Primary	Low	41051004800	22.1%	15.7%	73.7%	\$ 35,724.00
Primary	High	41051002701	52.1%	11.4%	58.4%	\$ 103,235.00
Primary	High	41051001900	52.9%	11.3%	73.8%	\$ 93,214.00
Primary	High	41051006100	53.3%	12.2%	76.3%	\$ 79,607.00
Primary	High	41051002600	53.4%	9.9%	65.5%	\$ 96,250.00
Primary	High	41051002501	55.7%	11.6%	67.4%	\$ 120,625.00

Sources: US Census Bureau ACS 5 year estimates 2009-2013, US Census Bureau 2010 SF1 tables, Mecklenburg County Board of Elections, Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city).

Table 9. Census Tracts with Lowest and Highest Turnout, Charlotte 2013 General Election

Election (Charlotte)	Turnout Level	Tract ID	Voter Turnout (2013 General)	% Minority (Not Non- Hispanic White alone)	% Bachelor's Degree and above	Median Household Income (2013 Dollars)
General	Low	37119005604	1.6%	37.5%	8.6%	\$ 25,405.00
General	Low	37119005609	2.3%	60.1%	22.7%	\$ 28,255.00
General	Low	37119004700	4.3%	96.3%	2.0%	\$ 19,167.00
General	Low	37119003700	6.7%	84.5%	24.8%	\$ 24,915.00
General	Low	37119003109	6.9%	87.0%	21.5%	\$ 31,219.00
General	High	37119003011	34.6%	9.8%	63.0%	\$ 84,853.00
General	High	37119003007	36.7%	9.3%	66.2%	\$ 127,130.00
General	High	37119002701	38.9%	9.0%	70.2%	\$ 110,033.00
General	High	37119002905	40.2%	9.2%	77.6%	\$ 145,278.00
General	High	37119002800	43.5%	3.2%	80.7%	\$ 196,518.00

Sources: US Census Bureau ACS 5 year estimates 2009-2013, US Census Bureau 2010 SF1 tables, Mecklenburg County Board of Elections, Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city).

Table 10. Census Tracts with Lowest and Highest Turnout, Charlotte 2013 Primary Election

Election (Charlotte)	Turnout Level	Tract ID	Voter Turnout (2013 Primary)	% Minority (Not Non- Hispanic White alone)	% Bachelor's Degree and above	Median Household Income (2013 Dollars)
Primary	Low	37119005604	0.5%	37.5%	8.6%	\$ 25,405.00
Primary	Low	37119005609	0.5%	60.1%	22.7%	\$ 28,255.00
Primary	Low	37119003109	2.0%	87.0%	21.5%	\$ 31,219.00
Primary	Low	37119004700	2.0%	96.3%	2.0%	\$ 19,167.00
Primary	Low	37119005845	2.3%	34.3%	63.9%	\$ 93,798.00
Primary	High	37119002800	14.9%	3.2%	80.7%	\$ 196,518.00
Primary	High	37119004800	15.3%	98.4%	24.3%	\$ 27,922.00
Primary	High	37119002905	15.4%	9.2%	77.6%	\$ 145,278.00
Primary	High	37119005401	15.4%	92.1%	14.4%	\$ 36,108.00
Primary	High	37119006109	17.3%	92.0%	18.9%	\$ 54,007.00

Sources: US Census Bureau ACS 5 year estimates 2009-2013, US Census Bureau 2010 SF1 tables, Mecklenburg County Board of Elections, Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city).

Appendix A: A Second Method for Calculating Voter Propensity

In addition to analyzing age-related voter turnout with the turnout odds ratio, we also used a second analytical framework, which may be more familiar to politicians, journalists, and other election observers. This framework simply takes the Voter Turnout Rate for one age cohort and compares it to the turnout rate for another. In this instance, however, we calculate the Voter Turnout Rate as a percentage of VAP, so as to account for all members of a cohort that might not be registered.

So, for example, if out of every 100 adult city residents 65 and older, we found that 50 percent of them cast ballots—a 50 percent turnout rate based on VAP—and that out of 100 city residents 18-34, just 10 percent of them cast ballots, the “Voter Turnout Percentage” Ratio would be 5:1.

This second method of analyzing differences in voting behavior isn’t as methodologically robust as the turnout odds ratio, but is arguably a method that is more familiar to politicians, journalists, and other election observers.

Table 1A below calculates the Voter Turnout Percentage Ratio differential between the 65 years and older VAP Population and the 18-34 VAP population. Again, the differences are stark. In Charlotte, a 65 year old was twenty-one times more likely in the primary to cast a ballot than their 18-34-year-old counterpart. Put another way, even though Charlotte boasts *3 times as many* 18-34 year olds as those 65 and older, residents 65 and older ended up casting almost seven times as many ballots as their younger counterparts.

While voters 65 years and older exercised the most “electoral clout” in the Charlotte primary—arguably punching almost twenty-two times above their electoral weight as 18-34 year old residents—the ratios for all other elections were almost as dramatic (Charlotte’s general election ratio was 11.7:1; Detroit shows 11.78 and 7.86 in its two elections; Portland’s primary was 9.56, and; St. Paul’s general election was 9.50). Only in Portland’s general election—where the ratio was just over 3—were younger residents even close to their elderly counterparts in terms of electoral clout.

Table 1A. Voter Turnout Percentage Ratio

City	Age Cohort	VAP (ACS 09-13)	Registered Voters	Primary Election Ballots Cast	General Ballots Cast	Primary Election Turnout as % of VAP	General Election Turnout as % of VAP	PRIMARY - Ratio of 65+ Turnout % vs 18-34 Turnout % (VAP)	GENERAL - Ratio of 65+ Turnout% vs 18-34 Turnout % (VAP)
Charlotte	18-34	197,910	152,483	1,763	7,311	0.9%	3.7%	<i>n/a</i>	<i>n/a</i>
	35-49	162,547	137,651	6,701	23,072	4.1%	14.2%	<i>n/a</i>	<i>n/a</i>
	50-64	117,443	112,649	11,573	32,181	9.9%	27.4%	<i>n/a</i>	<i>n/a</i>
	65+	64,119	68,031	12,348	27,876	19.3%	43.5%	<i>n/a</i>	<i>n/a</i>
	Total	542,019	470,814	32,385	90,440	6.0%	16.7%	21.62	11.77
Detroit	18-34	169,626	143,603	6,508	11,907	3.8%	7.0%	<i>n/a</i>	<i>n/a</i>
	35-49	135,320	136,637	13,878	23,924	10.3%	17.7%	<i>n/a</i>	<i>n/a</i>
	50-64	133,769	133,966	29,493	42,180	22.1%	31.5%	<i>n/a</i>	<i>n/a</i>
	65+	83,573	99,460	37,779	46,084	45.2%	55.1%	<i>n/a</i>	<i>n/a</i>
	Total	522,288	513,668	87,658	124,095	16.8%	23.8%	11.78	7.86
Portland	18-34	166,886	103,264	11,614	50,579	7.0%	30.3%	<i>n/a</i>	<i>n/a</i>
	35-49	132,408	106,743	30,690	81,674	23.2%	61.7%	<i>n/a</i>	<i>n/a</i>
	50-64	107,416	83,504	38,481	69,715	35.8%	64.9%	<i>n/a</i>	<i>n/a</i>
	65+	62,491	64,504	41,588	56,982	66.6%	91.2%	<i>n/a</i>	<i>n/a</i>
	Total	469,201	358,018	122,376	258,953	26.1%	55.2%	9.56	3.01
St. Paul	18-34	88,734	49,696	<i>n/a</i>	3,591	<i>n/a</i>	4.1%	<i>n/a</i>	<i>n/a</i>
	35-49	53,365	38,358	<i>n/a</i>	6,837	<i>n/a</i>	12.8%	<i>n/a</i>	<i>n/a</i>
	50-64	47,940	38,505	<i>n/a</i>	10,049	<i>n/a</i>	21.0%	<i>n/a</i>	<i>n/a</i>
	65+	25,599	26,161	<i>n/a</i>	9,841	<i>n/a</i>	38.4%	<i>n/a</i>	<i>n/a</i>
	Total	215,638	152,766	<i>n/a</i>	30,331	<i>n/a</i>	14.1%	<i>n/a</i>	9.5

Sources: US Census Bureau ACS 5 year estimates 2009-2013, US Census Bureau 2010 SF1 tables, Mecklenburg County Board of Elections, Oregon Secretary of State Offices. Analysis by PRC.

Note: Tract values of 0 or null are excluded. Only includes tracts shown in maps (tracts with at least 80% of population within the city).